Thank you very much for allowing me to be here. It is a privilege to come back to the Duke University School of Law. It was an enormous privilege to be here as a student many years ago and, of course, the law school is an even better law school now than it was then because of, among other things, the increase in size of faculty and the continuing evolution of faculty quality. I was very glad that they allowed me to attend law school here back when that happened, and I feel even more privileged to be here now. Thank you for permitting me to provide a few remarks.

I think it is interesting to go back to 1787 and 1861 and to talk a little bit about certain former presidents of the United States, which backward step into the historical record actually is not as irrelevant as it might seem. In my time at the Patent Trial and Appeal Board (PTAB) of the Patent and Trademark Office (PTO), we thought and talked often about President Abraham Lincoln, and only from time to time about Presidents Thomas Jefferson and James Madison. But Jefferson and Madison, like Lincoln, are relevant to patent discussions, generally, and to our discussion at this symposium.

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Jefferson and Madison are the presidents who, among their pursuits, spent a considerable amount of time talking about cost-benefit analysis in the context of patents. In fact, cost-benefit analysis—which is one of the principal subjects of this symposium—is at the very core of their letter correspondence\(^1\) on the subject of patents, which correspondence mainly took place during the formation of the Constitution, and then, thereafter, as part of their discussion relating to the first patent legislation. A quick look back at what they said helps frame some of the context to better understand the cost-benefit-analysis discussion going on currently.

But let me go to President Lincoln first, who is perhaps a little less germane to some of the discussion from today, but whose engagement with the patent system also contributes to the notion of a patent-system exceptionalism that always has existed and still is in evidence today, as can be seen in the existence and relevance of the PTAB.

President Lincoln is quite appropriately in the league with Jefferson and Madison as a candidate for the title of the “Patent President.” Among other things, he is the only president who actually had a patent issued in his name, being himself an inventor. He is also the president who really formed what today has become the PTAB. In 1861, he followed through on an Act of Congress\(^2\) that had been passed at the end of the administration of the President James Buchanan in the fall of 1860, which Act called for some number of people, three in particular, to review actions of the Patent Office and, possibly, to enter reversals of decisions by the Patent Office. It is that three-person board, then formed, which evolved over the course of some 152 or 153 years into what, today, is the PTAB. Eventually, from that group of reviewers, there came to be a Board of Appeals to which disappointed patent applicants could appeal, and then, later, there also came to be a Board of Interferences, which heard contests between patentees disputing ownership of the same inventions. At a point in time, those two Boards merged to form the Board of Patent Appeals and Interferences, which Congress later transformed, under the America Invents Act of 2011, into the PTAB. That is the tribunal


I had the pleasure of leading for four and a half years and which Board we have spent time discussing today.

One might be disposed to think that the discussion today reflects some special and new emergence of the importance of the review of Patent Office decisions, but that would not be an appropriate conclusion. It is not altogether new that we would stop to observe the unique importance of a tribunal operating in the patent space in the way that the PTAB does. To put the seeming novelty in truer context, when President Lincoln appointed the first three reviewers to serve as a board of review for decisions by Patent Office Examiners, it was, more specifically, in March of 1861. March 1861 is when he began the consideration of the candidates for appointment to the Board, and my understanding is that he made the appointments starting in April of 1861.

Those of you versed in U.S. history will recall that those are the very same months in which President Lincoln was giving thought as to how to handle the situation at Fort Sumter, the fort in South Carolina under siege or about to be under siege by the states in rebellion. Such weighty matters as the siege in South Carolina being on his plate, Lincoln nonetheless gave committed attention to the issue of the operation of this new type of patent tribunal. That is, the patent matters, or shall we say the “pre-PTAB patent matters” apparent received an amount and even, possibly, a depth of thought right alongside the consideration being given to the issue of the possible breakup of the United States. I find it amazing to think that these particular patent matters would receive such presidential attention; and I am willing to suggest that the giving of this level of presidential attention is demonstrative of patent matters having a history of at least some exceptional treatment.

Nor was Lincoln’s contemplation of the patent system and how it might improve through the operation of a group of reviewers serving as an appellate tribunal merely one that he took on at arm’s length, as a chief executive looking at another agency among the many within the national government. His appointment to the position as the chairman of that Board was that of a lawyer by the name of George Harding, with whom Abraham Lincoln actually had tried a patent case. Thus, his involvement with the overall process was not one of disinterested executive oversight, but a reach into his own personal involvement in the patent space and from his time in patent litigation. This personal experience and engagement prompted Lincoln to his particular choice of the person to lead the patent-appeal function.
But President Lincoln is perhaps not the most relevant president to some of the ideas that have been raised in the symposium today. He is certainly the most relevant to the PTAB itself, but not to other issues such as, for example, cost-benefit analysis, and the assessments we might undertake of work output and levels of scrutiny used by different “cohorts” of patent examiners.

You will recall that, when the Constitution of the United States was being hammered out, and somewhat contrary to most people’s recollection of the history of the situation, Thomas Jefferson was not in the United States and not a regular participant in those discussions. Rather, Jefferson’s participation in those discussions took place by way of correspondence through James Madison, who was very intimately involved in the process and, of course, here in the United States. Thomas Jefferson was in Paris and in other parts of France, serving a brief period as one of this young country’s emissaries to that much older country.

Please note here that my implicit ratification in my remarks of Thomas Jefferson as a Patent Demigod, whose guidance I firmly believe we do well to embrace, is made notwithstanding my true appreciation of deep flaws in Jefferson’s thoughts and actions.

First, let us observe that, when Jefferson was in France, he was not there alone. He was there with, among other people, a young lady by the name of Sally Hemings, whom history has treated quite unfairly. We think often of Michelle Obama as being the first African American First Lady, which she really is not. She is second on that list, after Sally Hemings. When Jefferson had returned to the United States and become president, his relationship with Sally Hemings had expanded and deepened about as much as had his relationship with the United States. In fact, one only need consult the birth records of the Jefferson-Hemings children to see that when Jefferson was not in Washington but in Charlottesville, there was no shortage of interaction between Jefferson and Sally Hemings. She was most certainly, in all his presidential years, the person with whom Jefferson lived when not in Washington, his companion, and his partner in procreation and other domestic endeavors. Accordingly, if assessing such things as we do normally, it is hard not to concede that she was early to the role as “significant other” of the president, second in time only to the likes of Martha Washington and Abigail Adams.

If we are able to set aside Jefferson’s big misdeeds—that of hiding Sally Hemings from the public and of allowing their joint offspring to be slaves—we still might find ourselves quite fond of
Thomas Jefferson. His contributions to the patent system are truly enormous not only because of his early thoughts and guidance as to the role patents could and eventually did play in a vibrant national economy, but also because he helped—after he was back in this country, and after the Constitution was in place—to hammer out the first Patent Acts, which really made the patent system manifest itself quite effectively in the United States. And his legislative involvement is only one of his post-Constitution contributions, another one of them being his quite deep and seminal involvement in the patent system as, effectively, the first U.S. Commissioner of Patents.

Going back, however, to the constitutional period and Jefferson’s discussions with Madison, you will remember that the most fundamental part of their discussion really centered on this one essential issue: Are the benefits of patents really worth their tremendous cost? And Jefferson particularly is noted for having emphasized how high the cost is of granting a monopoly, because monopolies—particularly monopolies on ideas and inventions—are truly expensive things for which everyone bears the cost. Accordingly, his predisposition was that patent monopolies should be avoided, indeed, that they not be granted.

But Jefferson was persuaded in the dialogue with Madison, who more often took the other side of that debate; namely, that although the cost of monopoly is high, the advantages of monopoly—as reward for invention—are themselves quite high, sufficiently so that we should consent to suffer the cost to the public.

On the subject of cost-benefit analysis in the context of this symposium’s papers, one issue perhaps worthy of more discussion involves the additional, and usually ignored, benefit inuring directly, but counterintuitively, to the public from blocking the practice of a patented invention. Specifically, once there is innovation moving forward through any particular technological channel, the common first reaction is to think that it is necessarily a bad thing for those other than the patentee not to be allowed to proceed down that same channel of innovation. But one of the not-so-often-discussed benefits to the public that arises has to do precisely with that blocking of a particular channel of innovation with a patent. That prohibition forces innovation in other channels, those channels themselves possibly yielding equally beneficial innovation, or possibly yielding

innovation which ultimately spurs even more profound breakthroughs than those advancements that would have been brought about had that blocked channel been open.

Generally, I suspect that were Jefferson’s and Madison’s eyes, again, to be on the calculus of benefits and costs involved in constructing a system for rewarding innovation, and were they to be thinking of the added complexity that characterizes technology and economics in modern times as compared with the state of those things in the late 1700s, they would be somewhat surprised if, in the current day, we did not find ourselves still somewhat intimidated and perplexed by the daunting task of the cost-benefit analysis associated with patents, because so much of what that involves touches on things which perhaps are not truly quantifiable. For example, how exactly does one measure how much money it takes to move someone into his garage for years at a time, to battle upstream against doubt and bad economics, to work through some innovation that, in the end, might or might not transform society? The incentive structure and the types of rewards that really move invention forward probably require continuing study, as we look at and evolve the regulations around patenting. Meanwhile, it is perhaps appropriate to recognize a certain amount of the imponderable as to what invention is and how the opportunities for reward actually move human beings.

Another subject covered by the symposium papers is how to evaluate the performance of groups or “cohorts” of patent examiners, and the actual standard of patentability they apply in their work. Few subjects could be more Jeffersonian. In fact, Jefferson, by himself, formed the first cohort of examiners because he was the first examiner. Subsequently, he was part of the first group of examiners, which he selected, presumably with at least some input from George Washington.

The record appears to reveal that, during Jefferson’s time in the role of examiner, he had changes in his view as to how much examination scrutiny should be applied in reviewing patent applications, deciding in the first instance that very intensive scrutiny should be applied to every application. This resulted in the grant of only as few as half a dozen or so patents in any one year. Later, it appears that, because of an onslaught of possibly as many as one hundred patent applications in a single year, it was decided that the

standard of scrutiny should be adjusted. Throughout these various periods of time during which the scrutiny level changed, Jefferson was involving different individuals in the process, thus creating additional, different sets of examiner cohorts who worked together, through successive regimes of training and decisionmaking to provide the country a body of patents. Accordingly, the national patent estate at any given time in that era (as is true in the current era) was the direct result of whatever decisions they had been making as to how they should equip themselves to carry out the examination duties and how stringent the process should be. It would be interesting to apply today’s analytical methods, if we could, to understand more precisely the impacts of the changes they made in the patent era in which they made those changes.

The symposium also addresses the subjects of the appropriate level of deference to give to decisionmakers in Executive Branch agencies ⁶ and the appropriateness of stacking judges on trial and appellate panels—topics which also resonate with the issues present in the days of Jefferson and Madison. They may not have confronted such issues in the patent context specifically, but they dealt with them in other contexts, leaving us with their views on those subjects, and thus allowing us to apply those views—if we so desire and are able to do so—in the patent field also. Looking at deference, there is one kind of deference I particularly hope PTAB decisions will receive. I always hope there will be occasion to see in the mindset brought to the review of the PTAB’s decisions a predisposition of respect—one which possibly would be both unintended and never expressly articulated—which is to say a kind of invisible deference that is never unfair to appellants—a deference grounded on the routinely high-quality reasoning and exposition to be found in PTAB decisions.

It is important to look at the structure of review, how the law frames around the different arms of government and how they are called to undertake adjudicatory review of an agency’s work. And it is important to follow the law as to such matters. A grounding in common sense and practicality also is important. The comment has been made in the context of standards of review, that, after a person gets past the standards-of-review question, standards of review not being unimportant, there is the question: “How good is your case anyway, no matter what the standard of review is?” Similarly in the

context of deference, it might be appropriate to conclude that, as one deals with issues such as *Chevron* deference, there is this fundamental question about the decision made by an agency tribunal: When you look at the decision itself, do you think the tribunal got it right? I think a tribunal that is seen as routinely making correct decisions necessarily will have an advantage, however hidden, in the discussion as to whether or not it should be afforded deference formally.

I also wanted to address, briefly, the subject of the PTAB as a “first mover” or as a “prime mover” in the part of the system where adjudicated decisions drive developments in the making of, or at least in the interpretation of, patent law. I think one thing that should be clear is that, if we were to make a diagram of the patent system—one that includes the PTAB as a part of the system, we would see the PTAB generating outputs and also receiving inputs from other parts of the system. Some of those inputs come to the PTAB as outputs from other parts of the system, most notably, in the form of binding decisions from the U.S Court of Appeals for the Federal Circuit. And the inputs include decisions from district courts when, for example, those courts reach conclusions as to the interpretation of patent claims. Such interpretations may usefully inform claim-interpretation decisions being made by the PTAB on the patent claims when those same claims are the subject of parallel litigation involving the same patent, even when those district court claim-interpretation decisions are not binding on the PTAB.

Our diagram also would show that the various inputs arriving at the PTAB are sometimes “first-instance inputs” not already bearing some input from the PTAB, including for example Federal Circuit decisions in cases arising from district courts and with no part of the matter having been adjudicated by the PTAB. The inputs also may be “feedback inputs,” being in the nature of feedback because, for example, they result from decisions by the Federal Circuit coming about from appeals of PTAB decisions, which Federal Circuit decisions then arrive back at the PTAB. Having so arrived, the Federal Circuit decisions might constitute general guidance for all future PTAB cases on given issues or, possibly, remand instructions for a particular case.

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Once the system is providing inputs to the PTAB, which are coming as first-instance inputs and as feedback inputs, the question well might be asked which part of the system is operating first or as the "prime operator" in causing evolution in patent law. Should movement in the system or in the evolution of the system be seen as beginning in a particular part of the system (that is, at the PTAB), or as beginning with the feedback that was provided into that part of the system (that is, with a decision from the Federal Circuit that was appealed from the PTAB and then went back to the PTAB)? Does the evolution of the patent system and patent law begin with a decision or the review of the decision? It could be argued that the movement of the system can come about as much from the early and forthright introduction of a new approach to issues by a lower tribunal as from the final adjudication by a higher court of a case in which the new approach has been advanced.

Many parts of the administrative estate in "patent world" impact what we see as "outputs" and influence what decisions are made and how they are made, but I think there is something to be said for any agency that can act well and quickly to help define the space it regulates and determine an effective state of affairs. The PTAB has an advantage in this regard because in all its trial matters the law requires it to act quickly, including by rendering final decisions in trials in no more than 365 days after the adjudicative process in an inter partes matter begins.

As a practical example of an area in which we might see how the PTAB could be the prime mover in defining the regime that exists, let us consider the example of claim interpretation, and the question as to which one of several tribunals could be most impactful as to what patent claims mean. This question arises in the context of the more general discussion as to the use of the "broadest reasonable interpretation" standard, which is the current PTAB approach for interpreting patent claims. The broadest reasonable interpretation exists in contrast to "district court interpretation," which is not intended to provide the broadest interpretation, but a possibly narrower interpretation of patent claim language more aimed at preserving the validity of patent claims.

Let me divert only momentarily to say this—it is important, when considering these two standards, also to ask this question: How big a difference is there between the two approaches, practically speaking? Many people will tell you that in 80 to 90 percent of the instances they see, the difference between broadest reasonable
interpretation and the *Phillips*\(^9\) or district-court standard is inconsequential. And then, in the remaining 10 or 20 percent, the debate has to do with whether there is a difference and, if so, whether the degree of difference is significant?

In any event, notwithstanding whatever good reasons that may have caused the Patent Office to decide to have a regulation in favor of broadest reasonable interpretation for deciphering claim language in PTAB trials, and with that operating as a possible point of unique and outcome-determinative influence for the Patent Office, I am very much of the view that a switch to the district-court standard actually would enhance the power of the PTAB, causing its decisions to deliver even more upfront impact in the system. That is, its role as first or prime mover would be enhanced. Because, by statute,\(^10\) the PTAB nearly always acts most quickly in the context of patent trials—by always having aggressive discovery, briefing, and trial schedules—if the PTAB used the same claim-interpretation standard as district courts, the PTAB very often would be the first tribunal deciding any issue of claim interpretation, which issue might arise, again, at another tribunal, such as a district court. And, having decided the claim-interpretation issues first, and probably often without later contradiction by a court, the PTAB decisions will set the direction of claim interpretation based on the primacy that results from acting first. At a minimum, even if another tribunal—for example, a district court—were to pick up a related claim-interpretation issue after the PTAB had considered that same issue, that court at least would find itself needing to acknowledge that a first mover—the PTAB—already had undertaken to make a decision. Then, that court either would or would not follow the PTAB decision—with an explanation inherently comparative in nature, with the PTAB decision as the baseline.

I have touched on several of the topics that are raised in this symposium. In the course of doing this, I have given what I hope will be seen as a very respectful nod to three great presidents of this country, whose framework and orientation to patent matters, and respect for patents, I try to keep in my mind whenever I come to greater and lesser questions about the patent system. The great people who sought to put into our Constitution provisions that allow the extension of patent protection to inventors, for all the things they

\(^9\) Phillips v. AWH Corp., 415 F.3d 1303 (Fed. Cir. 2005) (en banc).
might have done right or wrong in their personal lives—things which might, if they had been given the light of day, have led to more or less disgrace of their names—one thing is certainly true: They were extraordinarily forward-thinking about what might be achieved in our economy by taking the time to look at intellectual property and the tremendously beneficial things patents might do for us.

I do not think there is any person who credibly can assert that the United States has not done well to leverage the creativity of its people using the recognition and reward system that we have constructed. That system has helped bring about—or at least has not prevented—extraordinary levels of innovation operating to the benefit of the whole planet. It may well be that the patent system needs improvement, and has within it dysfunction; I doubt there is anyone who would argue that problems do not exist and that improvement is not needed. But I think we all can acknowledge that most of us live today, in this country and in other parts of the world, in a way that benefits tremendously from innovation arising in this county. This innovation has no comparison anywhere in the world or in human history, and it emerged because of how we have harnessed the energy, willingness, and ability of inventors, so that, within the system of government and rules we have in place, they continue to choose to innovate.

Again, thank you for allowing me to say a few words.