

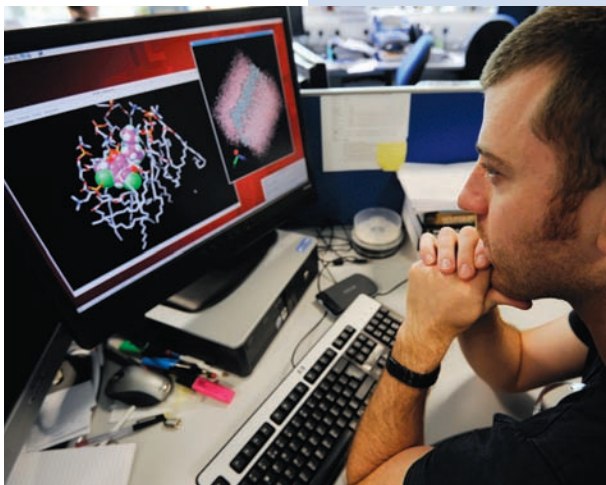
# POLICY BRIEF

BROOKINGS

SEPTEMBER 2011 | NO. 184

## The Comprehensive Patent Reform of 2011 Navigating the Leahy-Smith America Invents Act

JOHN VILLASENOR



REUTERS

The Leahy-Smith America Invents Act (AIA) approved in September 2011 constitutes the most significant overhaul of the American patent system in decades. This policy brief examines some key patent law changes and studies mandated by the legislation, and provides recommendations for companies on successfully navigating the new landscape.

Perhaps most notably, the new law will move the United States away from a “first to invent” system and closer to the “first to file” approach used in much of the rest of the world. Other important changes include a new proceeding in the U.S. Patent and Trademark Office (PTO) for third-party challenges to the validity of a recently issued patent, an expanded mechanism for a third party to provide information to the PTO that could be used to narrow or eliminate claims in a pending patent application being prosecuted by a commercial rival, and the introduction of a new, broadly applicable patent infringement defense based on prior commercial use.

To receive a weekly e-mail about Brookings news, events, and publications, sign up for the Brookings Alert at [www.brookings.edu](http://www.brookings.edu)

## Recommendations

- Under the “first to file” provision of the AIA, companies should be more careful when producing pre-filing disclosures for venues such as conferences and trade shows, with the understanding that under the AIA those disclosures may play a much larger role than in the past with respect to patentability of the associated IP.
- Under the AIA, rights to an invention prior to a filing date will depend more on the history of relevant disclosures and less on nonpublic, internal company documents such as laboratory notebooks. All companies—large and small—should consider how to modify their procedures for protecting, evaluating, and filing patents on their inventions accordingly.
- The AIA provides a grace period during which inventors can disclose their invention without losing the right to patent it, but leaves uncertainty regarding the definition of “disclosure”. Companies should carefully monitor case law and PTO actions that will undoubtedly help clarify this issue in the coming years.
- Companies should reevaluate the extent and manner to which they use provisional patent applications to preserve IP rights.
- In light of the increased number of mechanisms available to challenge the validity of pending and issued patents, companies engaged in patent prosecution should reconsider the tradeoffs of performing their own thorough prior art searches during patent prosecution. By finding and disclosing relevant prior art to the PTO, companies may reduce the likelihood that the disclosed prior art will be used successfully against them in future validity challenges.

In addition, there are several other aspects of the AIA that do not change patent law, but may have far reaching consequences. For example, an AIA-mandated study by the Government Accountability Office promises to furnish vitally important information on the economic impact of patent litigation by non-practicing entities, and will almost certainly influence future patent legislation. Under the AIA, the hurdles small businesses face in protecting their patents internationally will also receive attention through a PTO study.

It will take many years to develop a mature body of case law and legal scholarship on the full impact of the AIA. What is clear today is that it will profoundly impact the ways that patents are filed, prosecuted, and litigated in the coming years. Companies and other entities that retool their patent strategies to address these changes will be in a much stronger position to maximize the value of their intellectual property (IP) portfolios.

## First Inventor to File

One of the most significant components of the AIA concerns the move from a first to invent system to a first to file system. Under this provision, which takes effect 18 months after the AIA is enacted into law, an inventor may win the race to create the invention but lose the race to file the corresponding patent application, and thus lose the right to patent the invention.

However, the AIA includes an important exception in the form of a grace period allowing an inventor or others who obtained information from the inventor to make disclosures regarding the invention in advance of filing a patent application, as long as the application is filed within one year after the first disclosure. Some form of grace period has been a feature of the U.S. patent landscape since the 19th century, and allows an inventor time to examine the commercial practicability of the invention, engage in discussions with potential partners



REUTERS

The inclusion of both first to file language and a grace period in the new patent law creates what could amount to a hybrid between first to invent and first to file.

and customers and secure the resources necessary to draft a patent application.

The inclusion of both first to file language and a grace period in the new patent law creates what could amount to a hybrid between first to invent and first to file. For example, in the case of two inventors who independently disclose the same invention immediately following its conception, both the pre-AIA “first to invent” law and the post-AIA “first to file” law can favor the earlier discloser, who is by definition the earlier inventor if the disclosure is truly immediate. However, in the absence of disclosure in advance of a patent filing, pre-AIA law favors the earlier inventor, while the AIA “first to file” provision will favor the earlier filer.

As a result, under the AIA inventors and the companies that employ them must think much more carefully about how to manage pre-filing disclosures. Put simply, silence can be costly. To the extent that

a company remains quiet about an invention while contemplating whether or not to pursue patent protection, it stands exposed to the possibility of losing the right to do so if a competitor files first. A company wishing to avoid this risk faces the additional challenge that the AIA does not specifically define what constitutes “disclosure” sufficient to preserve patentability. The use of provisional patent applications, which offer advantages including a more formalized way to document the dates and content of disclosures than activities such as presentations at trade shows, should also be reevaluated in light of the AIA.

Some companies may find themselves targeted by competitors’ disclosures engineered specifically to foreclose patent opportunities. To reduce vulnerability to such attacks, companies can engage in preemptive “defensive” disclosures, but must be mindful of the impacts of these disclosures on their own patent filing deadlines.



John Villasenor is a nonresident senior fellow in Governance Studies and the Center for Technology Innovation at Brookings.

In addition, employees engaged in intellectual property creation can be made aware that there is an increased need to pursue timely steps to secure patent protection on new inventions. Internal company systems for documenting, reporting, and rewarding innovations can be modified to better match the provisions of the AIA. Companies should also consider the budgetary impact of the AIA in terms of the amount and timing of expenditures.

It is important to recognize that the AIA leaves substantial differences between the patent laws in the United States and those in other countries. For example, unlike in the United States both pre- and post-AIA, in Europe an inventor's own public disclosures in the year prior to a patent filing can be invalidating prior art. To the extent that for financial or other reasons a company needs to defer filing a U.S. patent application to a future date, in one sense the systems have actually moved farther apart. This is due to what amounts to a newly incentivized option to buy some measure of protection in the U.S. by disclosing in advance of a filing at the cost of losing patentability in Europe. This requires careful consideration of disclosure plans.

### Best Mode and Invalidity

The AIA does not alter the requirement that a patent application must "set forth the best mode contemplated by the inventor of carrying out" the invention. However, somewhat paradoxically, for proceedings commenced on or after the date of its enactment, the AIA eliminates the alleged failure to follow this requirement as grounds for asserting invalidity.

This change has the potential to alter a fundamental compact between an inventor and the government that is at the core of the patent system, which grants a patent holder the right to exclude others from practicing an invention in exchange for disclosing the best mode contemplated by the inventor. The AIA eliminates the failure to make

this disclosure as grounds for asserting invalidity. Some inventors may view this as creating an incentive to intentionally withhold information on how to best carry out an invention.

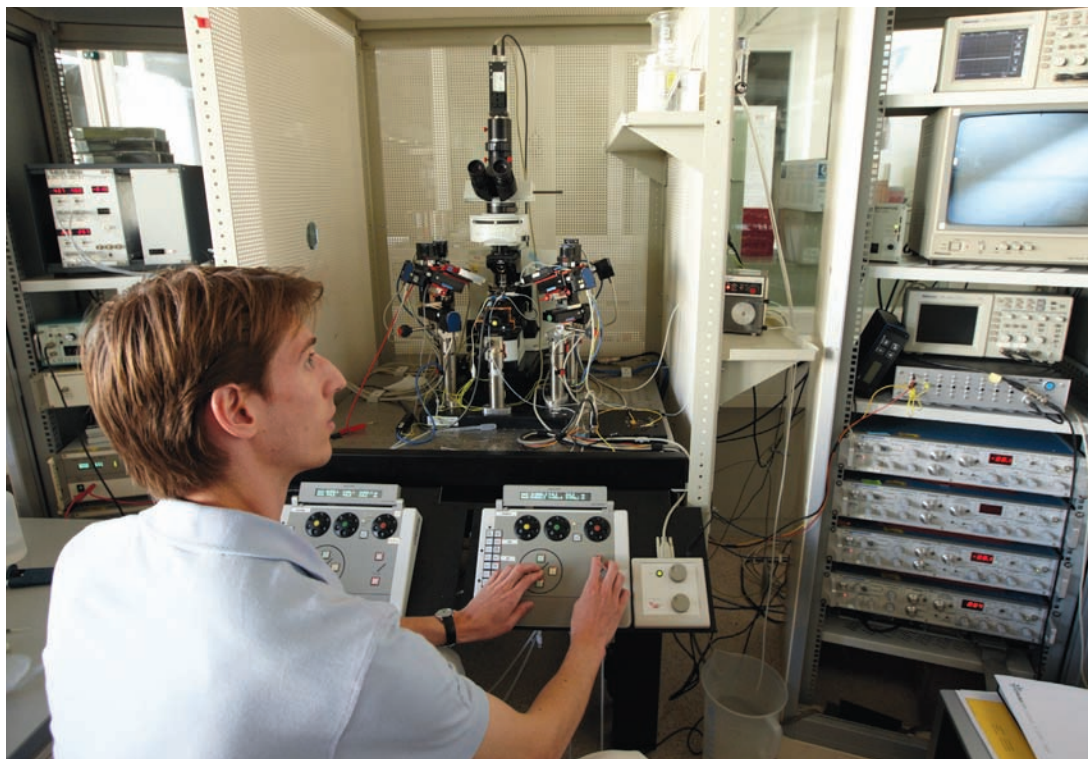
### Supplemental Examination

The AIA creates a new supplemental examination procedure, effective one year after enactment, allowing a patent owner to request that the PTO perform a supplemental examination to "consider, reconsider, or correct information believed to be relevant" to a patent. Subject to certain exceptions, this process can prevent a patent from being "held unenforceable on the basis of conduct" relating to this information.

The supplemental examination provision is particularly relevant to inequitable conduct allegations that are frequently raised by defendants in patent litigation. Defendants often try to identify information relating to the prosecution of patents that have been asserted against them that, in their view, indicates inequitable conduct rendering the patents unenforceable. Supplemental examination provides a way for a patent owner to preemptively attempt to inoculate a patent against such allegations.

### Pre-Issuance Submissions

Beginning one year after the AIA is enacted, third parties will have the option of providing pre-issuance submissions of prior art accompanied by "a concise description of the asserted relevance of each submitted document" to the PTO in connection with a pending application. Such submissions can be used, for example, to attempt to prevent or hinder the issuance of a patent that the submitting party views as detrimental to its interests. However, to the extent that a patent examiner finds the arguments provided through a pre-issuance submission unconvincing, the resulting patent might actually be strengthened, not weakened.



REUTERS

It is important to recognize that the AIA leaves substantial differences between the patent laws in the United States and those in other countries.

## Prior Commercial Use Defense to Infringement

Since 1999, alleged infringers of business method patents have had access to a “prior use” provision that can constitute a defense against infringement, provided certain conditions are met. For patents issued on or after the date of enactment of the AIA, the prior use defense can be applied, subject to certain exceptions, to patent infringement claims covering a much broader range of subject matter “consisting of a process, or consisting of a machine, manufacture, or composition of matter used in a manufacturing or other commercial process.”

## Post-Grant Review Proceedings

Post-grant review proceedings are conducted through the PTO in order to reconsider already-issued patents, and can lead to the confirmation, cancellation, withdrawal, or modification of patent

claims. The phrase “post-grant review” is sometimes used to broadly refer to multiple types of post-grant proceedings including the *ex parte* and *inter partes* reexaminations available under pre-AIA patent law, and sometimes to more narrowly refer to a specific new review option created by the AIA (in fact, in the AIA itself the phrase is used in both the broad and narrow meanings).

Under pre-AIA patent law, a requester wishing to initiate an *ex parte* or *inter partes* reexamination provides the PTO with one or more published prior art references and an explanation why those references, in the view of the requester, raise a “substantial new question of patentability.” The PTO can either grant or deny the request; if the request is granted, an *ex parte* reexamination proceeds without any further input from the requester (unless the requester is the patent owner), while in an *inter partes* reexamination the requester participates during the reexamination process.

Both [*ex parte* and *inter partes*] reexaminations have proven to be highly effective ways for third parties to challenge the validity of issued patent claims, often in tandem with or as a lower cost alternative to challenges adjudicated through the Federal court system and the International Trade Commission.



REUTERS

Both types of reexaminations have proven to be highly effective ways for third parties to challenge the validity of issued patent claims, often in tandem with or as a lower cost alternative to challenges adjudicated through the Federal court system and the International Trade Commission. According to data released by the PTO in June 2011, 92% of the requests for *ex parte* reexamination filed since the proceeding was introduced in the 1980s have been granted, and fewer than one quarter of patents subject to *ex parte* reexamination have emerged without any claim changes or cancellations. *Inter partes* reexamination was introduced in 1999; since then 95% of *inter partes* reexamination requests have been granted, and only 13% of patents subject to *inter partes* reexamination have survived with all claims confirmed.

The AIA leaves *ex parte* reexamination in place, but a year after enactment will replace *inter partes* reexaminations with “*inter partes* review” proceedings adjudicated by a newly renamed Patent Trial

and Appeal Board within the PTO. The pre-AIA threshold to grant an *inter partes* reexamination of a “substantial new question of patentability” will be replaced with a higher threshold requiring that the PTO find a “reasonable likelihood that the petitioner would prevail with respect to at least one of the claims challenged in the petition.” This higher standard will also be applied to *inter partes* reexaminations filed during the transition period immediately following enactment of the AIA and preceding the shift to *inter partes* review. *Inter partes* review requests must be filed no earlier than nine months (and in some cases longer) after the grant or reissue of the patent being challenged.

Additionally, the AIA creates a new “post-grant review” process through which a petitioner who is not the patent owner can request the cancellation as invalid of one or more claims of a patent granted or reissued within the previous nine months. The PTO can authorize a post-grant review if the information presented by the petitioner, “if not

rebutted, would demonstrate that it is more likely than not that at least one of the claims challenged in the petition is unpatentable.” Under the AIA this threshold can be satisfied not only using traditional invalidity arguments based on settled law, but also by a petition that raises “a novel or unsettled legal question that is important to other patents or patent applications.” This language amounts to an invitation to address “novel or unsettled” legal questions through the PTO, raising a number of issues relating to respective roles the courts and the PTO will play in resolving them.

For companies engaged in or threatened with patent litigation or those that simply want to launch a pre-emptive strike at patents held by a competitor, post-grant review introduces a new way to challenge patents. The AIA contains estoppel and other provisions intended to prevent a requester from having two bites at the apple by challenging a claim in both a PTO post-grant (or *inter partes*) review and a civil action or International Trade Commission proceeding. However, in some circumstances these provisions may turn out to be largely toothless, since patent cases often involve multiple defendants who form joint defense groups and engage in coordinated attacks on patent validity. There is nothing in the AIA preventing one defendant from challenging claim validity through a post-grant or *inter partes* review and another from simultaneously or later asserting invalidity of the same claims in the federal court system or at the International Trade Commission.

The AIA also expressly provides that, starting one year after enactment, statements by a patent owner filed in a federal court or with the PTO regarding claim scope can be cited to the PTO for consideration in *ex parte*, *inter partes*, and post-grant review proceedings to determine claim meaning.

## Other Provisions

In addition to codifying many changes to patent law, including those described above, the AIA

contains other provisions that will likely have a significant impact on the operation of the PTO and on future patent legislation. Several of these provisions are discussed below.

## Fee Diversion

One of the most controversial aspects of the patent reform debate has pertained to the practice of fee diversion, which arises because the PTO takes in an amount in fees that exceeds its appropriation. The Senate version (S. 23) of the AIA passed in March 2011 provided for the creation of a fund that would have allowed the PTO roll over excess funds into future fiscal years. However, in the House version (H.R. 1249) passed in June 2011 that became the template for the final legislation, this provision was removed and replaced with a newly established “Patent and Trademark Fee Reserve Fund” to be held in the treasury and into which excess fees will be deposited. This approach does not cleanly put the fee diversion issue to rest, and the details of how the reserve fund will be managed in future years remain unclear.

## Studies Mandated by the AIA

The AIA mandates several studies, including one to be performed by the Government Accountability Office to examine the “consequences of litigation by non-practicing entities, or by patent assertion entities,” to gather data, among other things, on the volume of litigation, the number of cases found to be without merit, the costs to patent holders, licensees, licensors, and inventors, the economic impact of this litigation, and the “benefit to commerce, if any, supplied by non-practicing entities or patent assertion entities that prosecute such litigation.”

“Non-practicing entities” and “patent assertion entities” are terms that are sometimes used to describe companies that have little or no business other than the assertion of patents. Patent litigation involving these entities has grown significantly in recent years, in large part due to the potential for

One of the most controversial aspects of the patent reform debate has pertained to the practice of fee diversion, which arises because the PTO takes in an amount in fees that exceeds its appropriation.

Recent Policy Briefs

“Improving Afghan War Strategy”

Michael E. O’Hanlon  
No. 180 (January 2011)

“Opportunity Through Education: Two Proposals”

Grover J. (Russ) Whitehurst  
No. 181 (March 2011)

“Protecting Civilians in Disasters and Conflicts”

Elizabeth Ferris  
No. 182 (March 2011)

“Korea, Colombia, Panama”

Mauricio Cárdenas and Joshua Meltzer  
No. 183 (July 2011)

Vice President for Communications  
Melissa T. Skolfield

The Brookings Office of Communications  
202.797.6105  
communications@brookings.edu

The views expressed in this Policy Brief are those of the author(s) and are not necessarily those of the trustees, officers, or other staff members of the Brookings Institution.

Copyright © 2011  
The Brookings Institution

large judgments and settlements. The GAO study provides an opportunity for an unbiased examination of a significant aspect of the litigation environment, and is likely to produce information that will be valuable in drafting future patent legislation.

The AIA also mandates that the PTO perform a study on international patent protections for small businesses. The financial burden of obtaining international patent protection is particularly heavy for small companies due to the combined costs of performing many different country-specific filings. As a result, many small companies either avoid foreign filings altogether, or perform foreign filings only for a small subset set of countries and only for the patents that they believe to be the most valuable.

A goal of the AIA-mandated study is to determine whether to recommend establishing a loan or grant program to help small businesses defray the costs

associated with international patent protection. It is likely the study will conclude that such a program would be beneficial to small businesses, but it is just as likely that implementing it will prove to be extremely difficult in the current budgetary environment. However, the study may influence future patent legislation in the United States and abroad, and may be useful in multilateral discussions regarding international patent protection.

## Conclusion

The AIA will reshape how United States patents are obtained, challenged, and valued in acquisition, licensing, and litigation settlement discussions. Companies that overhaul their intellectual property strategies in light of the provisions of the AIA will be in a better position to maximize the value of their patent portfolios and to strengthen their options in patent litigation matters. ■

## BROOKINGS

QUALITY. INDEPENDENCE. IMPACT.

The Brookings Institution is a nonprofit public policy organization based in Washington, DC. Our mission is to conduct high-quality, independent research and, based on that research, to provide innovative, practical recommendations that advance three broad goals:

- Strengthen American democracy;
- Foster the economic and social welfare, security and opportunity of all Americans and
- Secure a more open, safe, prosperous and cooperative international system.

### Learn more at [brookings.edu](http://brookings.edu)

Visit our website to find innovative, practical recommendations that matter—for America and the world.