



## CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

May 26, 2011

### **H.R. 1249** **America Invents Act**

*As ordered reported by the House Committee on the Judiciary on April 14, 2011*

#### **SUMMARY**

H.R. 1249 would amend the law that governs how the Patent and Trademark Office (PTO) awards patents. Among other things, the bill would alter the rule that prioritizes the award of a patent from the “first to invent” to the “first inventor to file.” As a result, PTO would change certain procedures it follows in awarding patents. The bill also would establish new review procedures that would allow individuals to challenge the validity of a patent and would modify PTO’s authority to collect and spend fees.

CBO estimates that enacting the bill would reduce net direct spending by \$725 million and revenues by \$8 million over the 2011-2021 period. Most of the change in direct spending would result from providing PTO with permanent authority to collect and spend certain fees. In total, the changes would decrease budget deficits by \$717 million over the 2011-2021 period. Because enacting the legislation would affect direct spending and revenues, pay-as-you-go procedures apply. CBO estimates that implementing H.R. 1249 would have a discretionary cost of \$446 million over the 2011-2016 period, assuming appropriation of the necessary amounts.

H.R. 1249 would impose both intergovernmental and private-sector mandates, as defined in the Unfunded Mandates Reform Act (UMRA), on certain patent applicants and other entities. The bill also would preempt the authority of state courts to hear certain patent cases. Based on information from PTO, CBO estimates that the costs of complying with those mandates would exceed the annual threshold for private-sector mandates established in UMRA (\$142 million in 2011, adjusted annually for inflation) in each of the first five years the mandate is in effect. CBO estimates that the cost to state, local, and tribal governments would fall below the annual threshold established in UMRA (\$71 million in 2011, adjusted annually for inflation).

## ESTIMATED COST TO THE FEDERAL GOVERNMENT

The estimated budgetary impact of H.R. 1249 is shown in the following table. The costs of this legislation fall within budget function 370 (commerce and housing credit).

	By Fiscal Year, in Millions of Dollars													
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2011-2016	2011-2021	
<b>CHANGES IN DIRECT SPENDING</b>														
Reclassification of PTO Spending														
Estimated Budget Authority	0	2,266	2,573	2,784	2,907	3,017	3,143	3,262	3,375	3,472	3,593	13,547	30,392	
Estimated Outlays	0	1,869	2,486	2,743	2,883	2,995	3,119	3,238	3,353	3,453	3,571	12,976	29,710	
New and Amended PTO Processes														
Estimated Budget Authority	0	43	92	99	113	123	129	134	141	149	157	470	1,180	
Estimated Outlays	0	35	83	97	110	121	127	134	140	147	155	446	1,149	
PTO Administrative Costs														
Estimated Budget Authority	0	8	7	3	0	0	0	0	0	0	0	18	18	
Estimated Outlays	0	8	7	3	0	0	0	0	0	0	0	18	18	
Reclassification of PTO Collections														
Estimated Budget Authority	0	-2,318	-2,672	-2,886	-3,019	-3,140	-3,272	-3,396	-3,516	-3,620	-3,750	-14,035	-31,589	
Estimated Outlays	0	-2,318	-2,672	-2,886	-3,019	-3,140	-3,272	-3,396	-3,516	-3,620	-3,750	-14,035	-31,589	
Electronic Filing Incentive														
Estimated Budget Authority	0	-3	-3	-2	-2	-2	-1	-1	-1	-1	-1	-12	-17	
Estimated Outlays	0	-3	-3	-2	-2	-2	-1	-1	-1	-1	-1	-12	-17	
Funding Agreements														
Estimated Budget Authority	*	1	1	*	*	*	*	*	*	*	*	2	4	
Estimated Outlays	*	1	1	*	*	*	*	*	*	*	*	2	4	
Total Changes in Direct Spending														
Estimated Budget Authority	*	-3	-2	-2	-1	-2	-1	-1	-1	0	0	-10	-12	
Estimated Outlays	*	-408	-98	-45	-28	-26	-27	-25	-24	-21	-25	-605	-725	
<b>CHANGES IN REVENUES</b>														
Estimated Revenues	-1	-3	-2	-1	*	*	*	*	*	*	*	-7	-8	
<b>NET INCREASE OR DECREASE (-) IN THE DEFICIT FROM CHANGES IN DIRECT SPENDING AND RECEIPTS</b>														
Impact on Deficit	1	-405	-96	-44	-28	-26	-27	-25	-24	-21	-25	-598	-717	
<b>CHANGES IN SPENDING SUBJECT TO APPROPRIATION</b>														
Estimated Authorization Level	0	-76	-37	5	44	76	n.a.	n.a.	n.a.	n.a.	n.a.	13	n.a.	
Estimated Outlays	0	294	-8	16	55	88	n.a.	n.a.	n.a.	n.a.	n.a.	446	n.a.	

Notes: Components may not sum to totals because of rounding.

Negative numbers denote reductions in spending, revenues, and the deficit.

PTO = Patent and Trademark Office; \* = between -\$500,000 and \$500,000; n.a. = not applicable.

## **BASIS OF ESTIMATE**

For this estimate, CBO assumes that the bill will be enacted near the end of fiscal year 2011, the necessary amounts will be appropriated each year, and spending will follow historical patterns for the PTO. Further, CBO assumes that most of the bill's provisions would be effective one year after the date of enactment.

H.R. 1249 would change the basis that PTO uses to award patents. Under current law, where two or more persons independently develop identical or similar inventions at approximately the same time, the patent is awarded to the inventor PTO established to be first through PTO's examination process. H.R. 1249 would direct PTO, under the same circumstances, to award the patent to the inventor whose application to PTO had the earliest filing date.

H.R. 1249 also would provide PTO with permanent authority to collect and spend certain fees, shifting collections and spending out of the PTO appropriation account and into a revolving fund. Further, H.R. 1249 would direct PTO's collections to be recorded in the budget as offsetting receipts, that is, offsets to direct spending. Under current law, PTO is authorized to collect fees from the public for specific activities related to processing applications for patents and trademarks. The agency assesses and collects fees for a number of different activities, and the rate for each is set in law. Currently, authority to collect and spend those fees is provided in annual appropriation acts, and the fees are classified as offsets to the agency's discretionary spending levels. For 2011, PTO received a gross appropriation of \$2,016 million, and CBO estimates the agency will collect fees of \$2,198 million that year to more than offset that appropriation.

### **Direct Spending**

Based on information from PTO and other agencies, CBO estimates that enacting H.R. 1249 would reduce net direct spending by about \$0.7 billion over the 2012-2021 period. Provisions of the bill that would reclassify PTO spending and broaden the agency's workload would increase spending by \$30.9 billion over the 2012-2021 period. Other provisions of the bill would decrease direct spending (by changing the amount of collections classified as offsets to direct spending) by \$31.6 billion over the same period.

**Reclassification of PTO Spending.** Because PTO's spending would no longer be controlled by the availability of appropriated funds, H.R. 1249 would make all of the agency's fee collections permanently available for spending. Based on historical growth in the number of applications filed for patents and trademarks and historical spending patterns, we estimate that enacting those provisions of H.R. 1249 would increase gross direct spending by about \$29.7 billion over the 2012-2021 period.

**New and Amended PTO Processes.** H.R. 1249 would establish two new procedures to review or update patents and amend one process already available under current law to review existing patents. PTO would be authorized to collect fees to offset much of the costs associated with those activities. Based on information from PTO, CBO estimates that those new and amended processes, taken together, would increase direct spending by \$1.1 billion over the 2012-2021 period.

Specifically, the bill would:

- Establish a new procedure, known as post-grant review, to review the validity of a patent. This option generally would be available within 12 months of the date the patent was issued and would take place in a court-like proceeding in which both the challenger and the owner of the patent present information regarding the validity of a patent. CBO estimates that implementing this new process would increase direct spending by \$140 million over the 2012-2021 period.
- Establish a new procedure that would allow patent holders to request that PTO review an existing patent to consider, reconsider, or correct information believed to be relevant to the patent. Should this supplemental review raise a new question of patentability, PTO would then reexamine the patent. CBO estimates that the supplemental reviews and the additional reexaminations that would result under the bill would increase direct spending by \$758 million over the 2012-2021 period.
- Amend a process already existing under current law, inter partes reexamination, to expand the universe of patents that could be challenged through this proceeding but also limit the time period during which such a challenge could be raised. CBO estimates that implementing the changes to inter partes reexamination procedures would increase direct spending by \$251 million over the 2012-2021 period.

**PTO Administrative Costs.** As a result of the switch to a “first-to-file” principle for granting patents, PTO would incur additional administrative costs, including updating its information technology systems, training staff, and preparing several reports for the Congress. Further, the bill would require PTO to establish at least three additional satellite offices in different regions throughout the country. CBO estimates that those changes would cost \$18 million over the 2012-2021 period.

**Reclassification of PTO Fees.** As noted above, the bill would permanently authorize PTO to set and collect fees and would direct those collections to be recorded in the budget as offsetting receipts (credits against direct spending). Further, the bill would amend current law to permanently increase fee rates that have been temporarily authorized in annual appropriation acts since 2005 and authorize PTO, after specified public notice and comment periods, to set fee rates at levels sufficient to cover the agency’s operating costs.

Based on information from PTO and historical patterns of collections, CBO estimates that enacting H.R. 1249 would result in collections of \$31.6 billion over the 2012-2021 period. Most of that amount, about \$30.5 billion, would stem from the reclassification of the fees from offsets to discretionary spending to offsetting receipts and from PTO's new authority to set fees to recover costs; the balance, about \$1.1 billion, would result from increases in fee collections related to the increases in the agency's workload.

**Electronic Filing Incentive.** In addition to fees PTO collects under current law, H.R. 1249 would establish a new fee that would be charged to patent applicants that do not use electronic means to file an application. Based on information from PTO, CBO estimates that about 5,000 paper applications, on average, would be filed per year, generating collections of about \$17 million over the 2012-2021 period. The bill would direct those collections to be recorded as offsets to direct spending and would make them unavailable for spending by PTO.

**Funding Agreements.** H.R. 1249 would change the amount of royalties or income earned by certain contractors that is required to be remitted to the federal government. Under current law, funding agreements between the federal government and contractors operating government-owned, contractor-operated (GOCO) laboratories allow contractors to retain, up to a certain threshold, all royalty and other income earned from patents received as a result of work performed under the contract. Beyond that, 75 percent of royalties or income earned above the threshold must be returned to the U.S. Treasury. The royalties returned to the Treasury are recorded as offsetting receipts. H.R. 1249 would reduce the amount deposited into the Treasury to 15 percent.

Currently, only one entity operating a GOCO laboratory returns royalties and license fees to the federal government. Over the past several years, the Ames Laboratory, operated by Iowa State University, has returned to the Treasury approximately \$1 million a year in license fees earned from patents awarded under its contract with the federal government. CBO estimates that reducing the percentage of income that is returned to the Treasury would reduce offsetting receipts (and thus increase direct spending) by about \$4 million over the 2011-2021 period.

## **Revenues**

H.R. 1249 would change how certain patent cases, known as false marking cases, are handled by the court system. False marking cases are brought when a defendant is accused of incorrectly claiming a product's right to certain patent protection. Under current law, such cases can be brought by any person on behalf of the government; the government receives half of the value of any fines or amount paid as part of a court-mediated settlement, with the person bringing the case receiving the other. H.R. 1249 would permit competitors to recover damages for the competitive harm caused by a defendant's false marking but would eliminate the option for individuals to seek fines on behalf of the

government by stating that only the United States can sue for a civil penalty. H.R. 1249 would further specify that a defendant would not be liable for a false marking suit if the patent involved either expired within three years of the alleged false marking or if the word 'expired' were added to the claim of patent protection.

Information from the Department of Justice (DOJ) indicates that in 2010, the government collected fines (recorded as revenues) of about \$3 million from false marking cases. Under current law, CBO expects that a diminishing number of new cases will be filed through 2011 and beyond, as courts define stricter standards for proving 'intent to deceive' on the part of the defendant, and as companies rectify their patent marking procedures in response to the risk of litigation. Based on information from DOJ, CBO estimates that about a third of currently pending cases will eventually be settled in court; we expect the rest to be dismissed with no monetary settlement. Thus, CBO estimates that under current law, by 2014, federal revenues from those cases will drop to less than \$500,000 a year.

By changing both who can litigate and their incentives for doing so, H.R. 1249 would significantly reduce both the pending caseload and the number of future cases filed. Therefore, CBO estimates that enacting the bill would reduce federal revenues by \$7 million over the 2011-2016 period and by \$8 million over the 2011-2021 period.

### **Spending Subject to Appropriation**

H.R. 1249 would provide PTO with permanent authority to collect fees and spend those collections thus changing the budgetary classification of those fees and spending. Under that permanent authority, PTO fees would be recorded as offsetting receipts rather than as offsets to discretionary spending. As a result of the reclassification, CBO estimates that this provision would decrease discretionary spending by \$10.4 billion and offsetting collections by about \$10.8 billion over the 2012-2016 period. On net, CBO estimates that implementing this provision would increase net discretionary spending by \$445 million over the five-year period, assuming that appropriation actions consistent with H.R. 1249 are enacted.

H.R. 1249 also would require the Small Business Administration to prepare a study of the effects on small businesses of eliminating the use of dates of invention for determining entitlement to a patent. The results of the study would be included in a report to the Congress due one year after enactment of the bill. In addition, H.R. 1249 would require the Government Accountability Office to conduct a study on the implementation of the bill's provisions by PTO; a report on the results of the study would be due four years after enactment of the bill. Based on information from the affected agencies, CBO estimates that those reporting requirements would cost \$1 million over the 2012-2016 period, assuming availability of appropriated funds.

## PAY-AS-YOU-GO CONSIDERATIONS

The Statutory Pay-As-You-Go Act of 2010 establishes budget-reporting and enforcement procedures for legislation affecting direct spending or revenues. The net changes in outlays and revenues that are subject to those pay-as-you-go procedures are shown in the following table.

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### CBO Estimate of Pay-As-You-Go Effects for H.R. 1249 as ordered reported by the House Committee on the Judiciary on April 14, 2011

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	By Fiscal Year, in Millions of Dollars												2011-	2011-
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2016	2021	
<b>NET INCREASE OR DECREASE (-) IN THE DEFICIT</b>														
Statutory Pay-As-You-Go Impact	1	-405	-96	-44	-28	-26	-27	-25	-24	-21	-25	-598	-717	
<b>Memorandum:</b>														
Changes in Outlays	0	-408	-98	-45	-28	-26	-27	-25	-24	-21	-25	-605	-725	
Changes in Revenues	-1	-3	-2	-1	0	0	0	0	0	0	0	-7	-8	

Note: Components may not sum to totals because of rounding

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## INTERGOVERNMENTAL AND PRIVATE-SECTOR IMPACT

H.R. 1249 would impose both intergovernmental and private-sector mandates, as defined in UMRA, on certain patent applicants and other entities. The bill also would preempt the authority of state courts to hear certain patent cases. Based on information from PTO, CBO estimates that the costs of complying with those mandates would exceed the annual threshold for private-sector mandates established in UMRA (\$142 million in 2011, adjusted annually for inflation) in each of the first five years the mandate is in effect. CBO estimates that the costs to state, local, and tribal governments would fall below the annual threshold established in UMRA (\$71 million in 2011, adjusted annually for inflation).

### Mandates That Apply to Both Public and Private Entities

**PTO fees.** H.R. 1249 would impose a mandate on both public and private entities by allowing PTO to set or adjust certain fees and by permanently extending other fee increases that are set to expire at the end of fiscal year 2011. The requirement to pay those fees is a mandate because the federal government controls the patent and trademark systems, and no reasonable alternatives to the systems exist.

Based on information from PTO, CBO estimates that the total cost to comply with the mandate would range from about \$220 million in 2013 to about \$350 million in 2017, with less than \$1 million of those costs accruing to public entities and the rest accruing to private entities.

**Restricting Prior-Use Defense.** H.R. 1249 would prohibit public and private entities from using the prior-use defense to patent infringement claims for business processes brought by a university or technology-transfer organization. Consequently, public and private entities that have been using business processes which are later patented by a university or technology-transfer organization would no longer be eligible to use those processes without permission from the patent holder. That restriction would be an intergovernmental and private-sector mandate. The cost of the mandate would be the cost to purchase a license from the patent holder, or the amount of net income the entity would lose as a result of no longer being able to use that patent commercially. Based on the small number of public entities that use business methods, CBO estimates that the cost to comply with the mandate would be small for public entities. According to information from industry experts, the prior-use defense has never been asserted in a recorded case and therefore it is likely that the use of such a defense would be uncommon. Consequently, CBO estimates that the cost to comply with the mandate for private entities would probably be small.

#### **Mandate That Applies to Public Entities Only**

H.R. 1249 would preempt the authority of state courts to hear certain patent cases. That provision would be an intergovernmental mandate as defined in UMRA. While it would limit the authority of state courts, CBO estimates that it would impose no duty on states that would result in additional spending.

#### **Mandate That Applies to Private Entities Only**

The bill also would impose a mandate on patent applicants by prohibiting certain tax strategies from being patented. The prohibition would apply to any application pending on the date of enactment and any application submitted for such a patent after that date. CBO has no basis for estimating the net income that would be forgone by a patent applicant for not receiving such a patent. Therefore, the cost to private entities to comply with this mandate is uncertain.

### **PREVIOUS CBO ESTIMATE**

On March 8, 2011, CBO transmitted a pay-as-you-go estimate for S. 23, the America Invents Act, reflecting a number of amendments adopted prior to Senate passage of the bill. One amendment would provide permanent authority to PTO to collect and spend fees.



CBO estimated that enacting S. 23 would reduce budget deficits by \$750 million over the 2011-2021 period.

On March 1, 2011, CBO transmitted a cost estimate for S. 23, the Patent Reform Act of 2011, as ordered reported by the Senate Committee on the Judiciary on February 3, 2011. That version of the legislation would not provide permanent authority to PTO to collect and spend fees. CBO's estimates of the House and Senate bills reflect those differences. The mandates contained in both the House and Senate bills are the same, except for the mandate regarding prior-use defense, which is only in H.R. 1249.

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