



CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

March 1, 2011

S. 23

Patent Reform Act of 2011

As reported by the Senate Committee on the Judiciary on February 3, 2011

SUMMARY

S. 23 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.

Under current law, PTO is authorized to collect fees for the services it performs. The fee rates are set in statute, and the amounts collected are available to offset the amounts appropriated for PTO’s operations. The bill would amend the statute to set higher fee rates for most of the agency’s activities and authorize PTO to adjust all fees periodically. S. 23 also would authorize PTO to set fees to offset most of the costs associated with new examination and review procedures established in the bill.

Subject to appropriation of the necessary amounts and including fee collections, CBO estimates that implementing S. 23 would reduce discretionary spending by about \$1.3 billion over the 2011-2016 period. Pay-as-you-go procedures apply because enacting the legislation also would affect direct spending and revenues. On net, CBO estimates that those changes in direct spending and revenues would reduce deficits by \$6 million over the 2011-2021 period.

S. 23 would impose both intergovernmental and private-sector mandates, as defined in the Unfunded Mandates Reform Act (UMRA), on certain patent applicants. 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 S. 23 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- 2016
	2011	2012	2013	2014	2015	2016	
CHANGES IN SPENDING SUBJECT TO APPROPRIATION							
Post-grant Review							
Estimated Authorization Level	0	3	4	5	11	13	36
Estimated Outlays	0	2	4	5	10	13	34
Inter Partes Review							
Estimated Authorization Level	0	8	14	16	20	24	82
Estimated Outlays	0	6	13	16	19	23	77
Supplemental Review							
Estimated Authorization Level	0	31	73	76	79	82	341
Estimated Outlays	0	25	65	75	78	82	325
Administrative Costs							
Estimated Authorization Level	1	6	5	1	0	0	13
Estimated Outlays	1	6	5	1	0	0	13
Offsetting Collections							
Estimated Authorization Level	0	-286	-332	-353	-378	-390	-1,739
Estimated Outlays	0	-286	-332	-353	-378	-390	-1,739
Net Changes in Spending							
Estimated Authorization Level	1	-238	-236	-255	-268	-271	-1,267
Estimated Outlays	1	-247	-245	-256	-271	-272	-1,290
CHANGES IN DIRECT SPENDING ^a							
Funding Agreements							
Estimated Budget Authority	*	1	1	*	*	*	2
Estimated Outlays	*	1	1	*	*	*	2
Electronic Filing Fee							
Estimated Budget Authority	-1	-4	-3	-2	-2	-1	-13
Estimated Outlays	-1	-4	-3	-2	-2	-1	-13
Total Changes in Direct Spending							
Estimated Budget Authority	-1	-3	-2	-2	-2	-1	-11
Estimated Outlays	-1	-3	-2	-2	-2	-1	-11

Continued

	By Fiscal Year, in Millions of Dollars						2011- 2016
	2011	2012	2013	2014	2015	2016	
CHANGES IN REVENUES ^b							
Estimated Revenues	-1	-3	-2	-1	*	*	-7
NET CHANGE IN THE BUDGET DEFICIT FROM CHANGES IN DIRECT SPENDING AND REVENUES							
Impact on Deficit ^c	*	*	*	-1	-1	-1	-4

Notes: CBO estimates that decreases in direct spending under the bill would total \$14 million over the 2011-2021 period and decreases in revenues would total \$8 million over the same period, thus reducing deficits by \$6 million over that period. CBO estimates that changes in direct spending and revenues would reduce deficits by \$1 million over the 2011-2014 period and by \$6 million over the 2011-2019 period.

Numbers do not sum to totals because of rounding; * = less than \$500,000.

- a. Negative numbers indicate decreases in direct spending.
- b. Negative numbers indicate decreases revenues.
- c. Negative numbers indicate decreases in the deficit.

BASIS OF ESTIMATE

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

The collection and spending of fees by PTO are subject to provisions in annual appropriation acts, and the fees are classified as offsets to the agency's discretionary spending levels. For 2010, PTO received a gross appropriation of \$2,016 million and collected fees of \$2,069 million to more than offset that appropriation.

CBO estimates that implementing the provisions of S. 23 would reduce net discretionary spending by about \$1.3 billion over the 2011-2016 period. Several provisions of the bill would increase PTO's workload, increasing gross discretionary costs over the period by about \$450 million. The bill would authorize PTO to collect fees to offset additional costs arising from new processes, and also would set in statute higher fee rates that have been authorized annually through appropriation acts since 2005. As a result, CBO estimates that fee collections would increase by about \$1.7 billion over the 2011-2016 period.

Spending Subject to Appropriation

S. 23 would change the basis that PTO uses to award patents. Under current law, where two or more persons independently develop identical or similar patents at approximately the same time, the patent is awarded to the inventor established to be first through PTO's examination process. S. 23 would direct PTO, under the same circumstances, to award the patent to the inventor whose application to PTO had the earliest filing date.

The bill would establish a new procedure, known as post-grant review, to challenge the validity of a patent and would amend procedures already available under current law to review existing patents. S. 23 also would establish a procedure that would allow patent owners to request that PTO consider or correct information believed to be relevant to a patent. PTO would be authorized to collect fees to offset much of the costs associated with those processes.

Post-grant Review. S. 23 would establish a new procedure to review the validity of a patent. This opportunity for post-grant review generally would be available within nine 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 would develop and present information regarding the validity of a patent. The bill would authorize PTO to collect fees to offset the cost of this new process.

Based on information from PTO, CBO expects that the volume of requests for post-grant reviews would grow each year once regulations defining the process are complete. CBO estimates that implementing this new process would cost \$34 million over the 2011-2016 period, which would be offset by fee collections.

Inter Partes Review. Under current law, an individual may question the validity of a patent through an inter partes reexamination, which allows both the challenger and the patent holder to participate in the proceedings by submitting arguments and filing appeals. There is no time limit on instituting an inter partes challenge; however, such challenges may only be brought against a limited pool of patents.

S. 23 would expand the universe of patents that could be challenged through this proceeding but also would limit the time period during which such a challenge could be raised. Further, the bill would require the inter partes proceedings to be conducted by an administrative patent judge; under current law, those proceedings are conducted by a patent examiner.

Based on information from PTO, CBO estimates that around 90 additional employees would ultimately be necessary to process the patent challenges and that implementing the changes to the inter partes reexamination procedures would cost \$77 million over the 2011-2016 period. PTO is authorized under current law to collect fees that would offset the costs of conducting those examinations.

Supplemental Review. S. 23 would 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 a supplemental review raise a new question of patentability, PTO would then order a reexamination of the patent. Based on information from PTO, CBO expects 2,600 requests for supplemental reviews each year with about half resulting in new reexaminations. CBO estimates that the supplemental reviews and the additional reexaminations that would result under the bill would cost \$325 million over the 2011-2016 period. S. 23 would authorize PTO to collect fees to offset those costs.

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. CBO estimates that those changes would cost \$13 million over the 2011-2016 period.

Offsetting Collections. S. 23 would amend current law to authorize PTO to increase fee rates that have been temporarily authorized in annual appropriation acts since 2005. Further, as noted above, the bill would authorize PTO to set and collect additional fees for the new re-examination and review processes that would be established by the legislation. Based on information from PTO and historical patterns of collections, and assuming appropriation of the necessary amounts, CBO estimates that those provisions would increase offsetting collections by \$1.7 billion over the 2012-2016 period. Most of that amount would be generated by the increase in fee rates; the balance, about \$300 million, would result from changes in fee collections related to the changes in the agency’s workload.

Direct Spending

CBO estimates that enacting S. 23 would reduce direct spending by \$11 million over the 2011-2016 period and by \$14 million over the 2011-2021 period.

Funding Agreements. Section 13 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 (credits against direct spending). S. 23 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 \$2 million over the 2011-2016 period and by \$4 million over the 2011-2021 period.

Electronic Filing Incentive. In addition to fees PTO collects under current law, S. 23 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 \$13 million over the 2011-2016 period and \$18 million over the 2011-2021 period. The bill would direct those collections to be recorded as offsets to direct spending.

Revenues

S. 23 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 claim receiving the other half. S. 23 would continue to permit competitors to recover damages for the competitive harm caused by a defendant's false marking but would eliminate the option for other individuals to seek fines on behalf of the government.

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, S. 23 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.

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.

CBO Estimate of Statutory Pay-As-You-Go Effects for S. 23 as reported by the Senate Committee on the Judiciary on February 3, 2011

	By Fiscal Year, in Millions of Dollars											2011-	2011-
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2016	2021
NET DECREASE (-) IN THE DEFICIT													
Statutory Pay-As-You-Go Impact	0	0	0	-1	-1	-1	-1	-1	0	0	0	-4	-6
Memorandum:													
Changes in Outlays	-1	-3	-2	-2	-2	-1	-1	-1	0	0	0	-11	-14
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.

INTERGOVERNMENTAL AND PRIVATE SECTOR IMPACT

S. 23 would impose both intergovernmental and private-sector mandates, as defined in UMRA, on certain patent applicants. 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).

Mandate That Applies to Both Public and Private Entities

S. 23 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 \$250 million in 2012 to about \$300 million in 2016, with less than \$5 million of those costs accruing to public entities and the rest accruing to private entities.

Mandate That Applies to Public Entities Only

S. 23 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 certain 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 a patent. Therefore, CBO cannot estimate the cost to private entities to comply with this mandate.

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