THE COALITION FOR 21ST CENTURY PATENT REFORM

Protecting Innovation to Enhance American Competitiveness

What Canada's Move to First-Inventor-to-File Suggests for Us in S. 23

Positive Impacts Greatly Outweigh Any Possible Negative Consequences

Patenting increased in Canada once the first-inventor-to-file rule took effect

An analysis done in 2002 of Canada's adoption in 1989 of a first-inventor-to-file system, *From First-to-Invent to First-to-File: The Canadian Experience,* Robin Coster, http://www.torys.com/Publications/Documents/Publication%20PDFs/ARTech-19T.pdf, concludes that this change to Canadian patent law was not only noncontroversial, but goes on to explain that implementation and subsequent operation of the first-inventor-to-file system over the succeeding dozen years were "uneventful."

This analysis noted that, in the first five years under the new Canadian law, patents issued in Canada grew by 61%. After examining the change from the standpoint of both fairness and efficiency, the author concluded that "the adoption of a first to file system has not fundamentally or detrimentally altered Canadian patent practice" and the "evidence is that Canada grants more and more patents every year, evidence of a strong environment for innovation and successful patent law."

Lo and Sutthiphisal found that the first-inventor-to-file rule had a clearly "positive impact" on Canadian inventors; potential negative consequences were not statistically significant

A more recent analysis of the Canadian experience with its first-inventor-to-file transition used statistical and economic data in an effort that attempted to uncover negative consequences for "small entities," *Does it Matter Who Has the Right to Patent: First-to-Invent or First-to-File? Lessons from Canada*, S.T. Lo and D. Sutthiphisal, NBER Working Papers, No. W14926, (April 2009), http://ssrn.com/abstract=1394833. This paper produced a number of findings, among which are the following:

At pages 22 and 23, the reforms did not dilute the incentive to carry out inventive activity: "This finding [how reforms affected inventive efforts based on real R&D spending] suggests that the switch from a first-to-invent system to a first-to-file system neither diluted the incentive to carry out inventive activity nor induced Canadian industries to devote additional R&D efforts."

At page 23, the reforms had a positive impact on patenting by Canadian inventors in Canada and the United States: "The results in Table 2 [Canadian inventive activity compared to that in the United States] imply that the Reforms had a *positive impact* on Canadian inventors' patenting both in Canada and in their largest export market (the U.S.) but no influence on their inventive efforts." [Emphasis added.]

At pages 25 and 26, no statistically significant impact on patenting by domestic-focused industry in Canada: "We found that in each and every regression on patenting the estimated coefficient of being domestic-oriented and Canadian industries the post-reform years is negative though *not statistically significant*." [Emphasis added.]

At page 37, moving to first-inventor-to-file triggered no need for any increased patent filings by Canadian inventors: The data demonstrate no "race to the Canadian IP Office" was triggered in the move to first-inventor-to-file; there was no flood of patent applications filed by Canadian inventors once the first-inventor-to-file rule took effect in 1989. In fact, the paper reports that during the three years before the law change, Canadian inventors filed 8,330 patent applications compared to 7,625 applications during the succeeding three years.

Year	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
							Panel A: Canadians									
CIPO applications	1,785	1,951	1,936	2,017	2,026	2,092	2,161	2,527	2,772	3,031	2,564	2,433	2,628	2,791	2,926	2,957
CIPO grants	1,348	1,474	1,446	1,485	1,444	1,428	1,369	1,511	1,639	1,625	1,009	984	1,058	1,123	1,216	1,229

At page 45, the ratio of small-entity to large-entity patent filings in Canada was essentially unchanged: The number of Canadian "small entities" filing for patents showed little change after first-inventor-to-file took effect. "Large firms" had 31.0% of patent filings in 1984 and ten years later this percentage had grown by less than two percentage points to 32.9%. Lo and Sutthiphisal were unable to specifically attribute this change to first-inventor-to-file as opposed to requiring annual maintenance fees on patent applications, the change to a 20-year patent term from patent filing, and opening the Canadian patent system to pharmaceutical patenting.

	Pre-reform years				Inter-reform years			Post-reform years				
Share of patents (%)	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Not assigned	34.3	34.3	33.4	40.2	36.8	37.7	35.6	37.8	39.3	34.9	34.8	33.2
Assigned to individuals	1.4	1.0	1.0	1.5	1.4	1.3	1.6	1.8	1.2	1.9	1.6	1.5
Assigned to small firms	36.7	33.7	34.7	31.9	33.7	31.6	30.7	27.5	25.9	29.4	29.2	32.4
Assigned to large firms	27.7	31.0	30.9	26.5	28.1	29.3	32.1	32.9	33.5	33.8	34.5	32.9

What Lo and Sutthiphisal identify as possible "negative" consequences from the Canadian law changes can be attributed to forcing patent applicants to pay annual "maintenance fees" and limiting the patent term to 20-years from filing.

Lo and Sutthiphisal state in their paper that the 1989 Canadian patent law changes "seemed" to have a small negative impact on patenting of Canadian domestic-oriented industries in Canada, albeit they concluded that "the Canadian Patent Reforms did not change R&D efforts by Canadian inventors." Even though they state that this "small negative impact" was *not* statistically significant—meaning that their data did not demonstrate any *actual* impact either positive or negative in this regard—they were unable to definitively tie any possible negative consequences to the first-inventor-to-file provisions of the Canadian reforms.

Importantly, they made no effort to determine in any empirical manner the consequences from two highly consequential changes to Canadian patent law made simultaneously with the adoption of the first-inventor-to-file rule: the requirement that patent applicants pay annual maintenance fees and the limitation on a patent term to 20

years from the initial filing for a patent, rather than 17 years starting from the date the patent actually issued.

The experience in the United States at the time the 20-year patent term became effective in June 1995 was that there was a spike in patent filings before these changes took place, followed by a reciprocal drop in applications filed immediately thereafter. In 1995, 123,958 U.S.-origin patent applications were filed compared to only 106,892 in 1996. Patent filings then increased in 1997 to 120,445—well above the pre-1995 patent filing level. The Canadian data on patent filings by Canadians show a similar trend.

At a minimum, the Canadian filing statistics fully refute any contention that Canadians engaged in a "race to the patent office" or engaged in "patent flooding" once first-inventor-to-file took hold. Instead the actual data in the paper is fully consistent with the conclusion that the change in Canadian law had no significant impact on Canadian patent filing practices.

The same can be said for data in the paper comparing filing by large- and small-entity inventors. The relatively small change in percentages noted above were not—and cannot be—specifically attributed to the change to first-to-file, as opposed to the other 1989 changes: adoption of maintenance fees, new patent term and opening the patent system to pharmaceutical patents. Moreover, the small change in percentage terms in patent filings as between large and small entities is overwhelmed by the *overall 61% growth in patenting in Canada within five years after first-inventor-to-file took hold!*

What does the Canadian experience suggest for the United States? Enact S. 23!
No prejudice to small entities, no patent flooding, no loss of incentive to invent.