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Inventing Our Way Out of Joblessness

By Paul R. Michel and Henry R. Nothhaft

As President Obama and Congress search for ways to jump-start job creation in our stalled economy, their best strategy may be right under their noses — in the voluminous backlogged files of the United States Patent and Trademark Office.

This is the agency, after all, that issues the patents that technology startups and other small businesses need to attract venture capital to pay salaries. Three-fourths of executives at venture capital-backed startups say patents are vital to getting financing, according to the [2008 Berkeley Patent Survey](#), a national study of patents and entrepreneurship. And startups are responsible for almost all the new jobs created in the United States since 1977, [according to a study by the Kauffman Foundation](#).

Unfortunately, since 1992, Congress has diverted more than \$750 million in patent fees to other purposes. That has left the patent office itself underfinanced and burdened with a backlog of 1.2 million applications awaiting examination, more than half of which have not had even a first review.

To revitalize America's engine of entrepreneurship — and create as many as 2.5 million jobs in the next three years — Congress should, first, give the patent office a \$1 billion surge to restore it to proper functioning. This would enable the agency to upgrade its outmoded computer systems and hire and train additional examiners to deal with the threefold increase in patent applications over the past 20 years. Congress should also pass pending legislation that would prohibit any more diverting of patent fees and give the office the authority to set its own fees.

Once the patent office is back to operating effectively, the backlog of 1.2 million applications should yield, judging from history, roughly 780,000 issued patents, about 137,000 of which would go to small businesses. Then, going forward, the agency could grant an additional 88,000 patents within three years. By 2013, small businesses would have received some 225,000 patents that they could then use to secure financing to build their businesses and hire more workers.

To be sure, not every patent creates a job or generates economic value. Some, however, are worth thousands of jobs — Jack Kilby's 1959 patent for a semiconductor, for example, or Steve Wozniak's 1979 patent for a personal computer. It's impossible to predict how many new jobs or even new industries may lie buried within the patent office's backlog. But according to our analysis of

the data in the Berkeley Patent Survey, each issued patent is associated with 3 to 10 new jobs.

So our guess is that restoring the patent office to full functionality would create, over the next three years, at least 675,000 and as many as 2.25 million jobs. Assuming a mid-range figure of 1.5 million, the price would be roughly \$660 per job — and that would be 525 times more cost effective than the 2.5 million jobs created by the government's \$787 billion stimulus plan.

To encourage still more entrepreneurship, Congress should also offer small businesses a tax credit of up to \$19,000 for every patent they receive, enabling them to recoup half of the average \$38,000 in patent office and lawyers' fees spent to obtain a patent. Cost, after all, is the No. 1 deterrent to patent-seeking, the patent survey found.

For the average 30,000 patents issued to small businesses each year, a \$19,000 innovation tax credit would mean a loss of about \$570 million in tax revenue in a year. But if it led to the issuance of even one additional patent per small business, it would create 90,000 to 300,000 jobs.

Taken together, fully financing the patent office and creating an innovation tax credit could mean as many as 2.5 million new jobs over three years, and add up to 600,000 more jobs every year thereafter.

It only makes sense to help innovative small businesses make their way to the patent office and, once there, find it ready to issue the patents that lead to new jobs.

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