Assessing patented technologies within the Brazilian "Green" Patent Applications Program 2012-2014

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Background and purpose of the study

Fast-track "green" patent applications initiatives allow applications classified under IPC Green Inventory codes, www.wipo.int/classifications/ipc/en/est/, to be examined and granted at a faster pace than regular patent applications. These programs were introduced in 2009 following issues from the United Nations Framework Convention on Climate Change (UNFCCC). Their aim is to accelerate the development and transfer of technologies for climate change mitigation and adaptation. A number of mainly industrialized countries introduced these programs and were later joined by some emerging economies like Brazil and China. Authors assess the Brazilian "Green" Patent Applications Program 2012-2014 mining INPI data. Some key questions are addressed:

- Speeding up the examination and identify strategic green technologies for the country were among the program targets, Carvalho dos Reis, 2013. Is there evidence that the aims and expectations of the Brazilian green patent fast track program are fulfilled? If so, which indicators would help? Do these programs significantly reduce the time from filing the patent to it being granted, compared to regular examination procedures?
- Causes that explain a low usage rate of Fast-Tracking Programs, Brazil is not the only exception among countries with these programs.
- Did the program help in the diffusion of green technological knowledge? And what could be the impact on stimulation of the green sector in Brazil through this program?
- Also authors address other questions like: How many patents have been filed under the various fast-tracking schemes? Which technologies are mostly concerned? What type of company is most likely to make use of the fast-tracking procedure?

Methods used

Authors have mined data of the two calls and profiled participants, technologies and duration of the process in order to validate if the process was faster than the traditional one. To organize and analyze the data, Tech Mining with Excel spreadsheets and VantagePoint text-mining software were used. The INPI authors' participants introduced as IP experts their expertise to comment and analyze the results.

Findings and discussion

Brazil established a one year or 500 patent submissions condition to limit the volume of submissions. So the green patent program has had until now two calls, first April 17th 2012 to April 16th 2013 and a second call that finished last April 16th 2014. Only 90 submissions were registered the first year and 100 during the second, Table 1.

Table 1. Green fast track patent submissions.

| Calls | Number of submissions |
|-------------------|-----------------------|
| 2012 / 2013 April | 90 |
| 2013 / 2014 April | 100 |

Source: INPI, Brasil

A total of 54% of the submissions came from institutions, 37% from companies, and 18% from universities. Half of the technologies belong to the waste management area. The rest are agriculture 21% and alternative energies 20%. Also there are a reduced number of submissions coming from energy conservation (6%) and transportation (3%) areas.

The participation rate of the fast track in Brazil is still very low but so highlights as well, Dechezleprêtre, 2013, the situation in Australia, Canada, Japan and Korea (between 1% and 2% are green patents). However the good scores from the US and UK programs, identify interesting peers to learn enhancement practices.

The average examination time in Brazil is five years and four months, Dechezleprêtre, 2013; the results for the fast track show 378 to 468 days, averages which confirm the time reduction target. However Dechezleprêtre, 2013, page 18 pointed out that there are also some disadvantages in accelerating the granting of a patent that should be also taken into account to assess the programs and understand certain low rates of participation.

Following some Carvalho dos Reis, 2013 expectations about results of this Brazilian program: It is still early with just two years to determine if the fast track program plays a role in the contribution to the development of a local industry based on these technologies.

Any impact in the development, technology transfer and commercialization of Green Technologies in Brazil could be tracked analyzing patent citation data, licences agreements and through the location of the foreign applicants. Unfortunately in this last case the program attracted the interest of 18 non residents during the first call, but this number declined to just 2 during the second call.

Other expectations like stimulation for the domestic scientific research and development for green technologies or the creation of a database of green patent documents are still pendant of validation.

Conclusions

Undoubtedly the main result until now is the time from application to grant is reduced to approximately a fifth of the time. This introduces a qualitative change that could be used to achieve other effectiveness targets.

A more detailed discussion on the mined data and conclusions addressing the key questions pointed here out will be included in the final version of this paper with other Tables and Figures.

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