

There are many options for fast-tracking clean technology patent applications

In the fast lane

The grant of a patent can be delayed by years due to backlogs at patent offices around the world. However, recognising the urgent need to address climate change, certain patent offices have established programmes to expedite the examination of patent applications related to clean technologies. Consequently, patents are valuable assets, particularly to companies in emerging clean technologies such as biomass and biofuels.

Through these exclusive rights, companies can prevent others from commercially using the patented invention, thereby reducing competition and establishing market share. They can be used as defensive tools and provide leverage in negotiations. They can also become revenue sources through license or sale.

As such, most companies and investors view a patent portfolio as essential, even if there is no plan to enforce the patents in litigation, and robust numbers of patents in the fuels industry continue to get granted. For example, Table 1 lists organisations receiving five or more US utility patents.

Depending on the particular patent office, the time to grant of a patent is reduced by 42% to 75% for patents having fast-track examination. A summary of the latest programmes for fast-tracking clean technology patents follows below.

Australia

On 15 September, 2009, IP Australia announced a fast-track examination programme for patent applications in the field of green technology.

First-named owner	2011	2012	2013	2014	2015	Total
Individually owned patent*	8	12	20	17	12	69
Shell Oil Company	5	5	5	11	15	41
Afton Chemical Company	1	4	5	14	6	30
BASF SE	3	2	2	6	3	16
Elevance Renewable Sciences	2	2	3	4	0	11
ExxonMobil Research and Engineering Company	1	1	3	0	4	9
UOP	0	0	0	2	7	9
Innospec	0	1	0	4	2	7
Butamax Advanced Biofuels	0	0	1	3	2	6
Clariant Finance (BVI)	0	0	0	3	3	6
Re Community Energy	0	2	4	0	0	6
Bestline International Research	2	1	1	1	0	5
Endicott Biofuels II	0	3	1	1	0	5

Table 1 – Rank-ordered listing of organisations receiving five or more US utility patents having a primary patent classification of “fuel and related compositions”. Data excerpted from https://www.uspto.gov/web/offices/ac/ido/oeip/taf/tecasg/044_torg.htm

*According to the US Patent and Trademark Office, this entry corresponds to (1) patents for which ownership was not assigned at the time of grant (i.e., ownership was presumably retained by the inventor(s)) and (2) patents for which ownership was assigned to an individual at the time of grant (i.e., ownership assignment was not made to an organisation). See https://www.uspto.gov/web/offices/ac/ido/oeip/taf/tecasg/explan_torg.htm

According to IP Australia, the programme helps “green innovators find a fast track to the marketplace by offering priority to environmentally-friendly technologies in the patent application system”. Under the programme, examination of patent applications is expected to begin within four to eight weeks, and no additional fee is required. Forty-three patents were reported as fast-tracked under the programme from September 2009 to August 2012.

Brazil

The National Institute of Industrial Property (INPI) launched a “Green Patent” pilot programme on 17

April, 2012 to accelerate the patenting of green technologies in alternative energy, transportation, energy conservation, waste management, and agriculture. The programme became permanent on 6 December, 2016. Data from 9 June, 2015 indicates that a total of 49 patents were granted under the programme, 55 applications were rejected, 121 applications received unfavourable opinions, and 61 applications received office actions.

In November 2015, the US Patent and Trademark Office (USPTO) and INPI signed a Memorandum of Understanding establishing a Patent Prosecution Highway (PPH) programme. Under

the PPH programme, each country may use the search and examination results prepared by the other, which should reduce examination time. The INPI will only accept applications under the programme that are directed to oil, gas, or petrochemical inventions, while the USPTO will accept applications directed to any subject matter. The programme began 11 January, 2016 and will end on 10 January, 2018, or sooner once each patent office has accepted 150 applications.

As of 6 March, 2017, the INPI has received 38 PPH petitions and accelerated examination of 25 applications. Approximately 70% of the accelerated applications have been

granted as patents. It is expected that the majority of PPH petitions will be filed at the INPI rather than the USPTO because examination at the USPTO typically occurs more much quickly due to backlogs at the INPI. However, the USPTO has reported that they received two PPH petitions in October 2016 based on patents that were issued by the INPI.

Canada

The Canadian Intellectual Property Office issued an initiative on 3 March, 2011 to accelerate the examination of applications pertaining to green technology. Under the initiative, applicants can request accelerated examination by submitting a declaration stating that the application relates to a technology that could help to resolve or mitigate environmental impacts or conserve the natural environment and resources if commercialised. No additional fee is required. Typically, an office action is received in one to three months of requesting accelerated examination, a significant reduction from the 12-24 months it usually takes to receive an office action.

A searchable public database of the accelerated green technology patents and applications is also available. As of 14 March, 2017, the database contains 262 patents and 86 applications.

China

Since 1 August, 2012, prioritised examination of applications relating to energy conservation, environmental protection, or green technologies has been available in China. Applicants must submit a search report by a qualified entity or a translation of a search report issued by another country. Once a request for prioritised examination is granted, a

first office action is expected to issue within 30 days, and prioritised examination is expected to be completed within one year. In 2014, China had a total of 61 green technology patents granted, mostly in solar (33), wind (12), and hybrid and electrical car (8) technologies.

Israel

A new category of applications eligible for priority examination was created for “green patents” by the Israeli Patent Office on 27 December, 2009. To request priority examination, applicants must provide an explanation as to why the invention helps advance environmental protection. However, the declaration and extra fees normally required for priority examination are not required. Additionally, a request for priority examination can be made after an application

has been filed if examination has not started. Applications will be examined within three months after qualifying for priority examination.

Japan

On 1 November, 2009, the Japanese Patent Office (JPO) implemented a programme allowing for the accelerated examination of “green inventions” having a beneficial effect on the environment through low energy consumption or reduction of carbon dioxide emissions. Under the programme, applicants can receive a first office action in about two months. The JPO’s annual report of 2010 indicated that 47 applications for accelerated examination were made between 1 November, 2009 and 31 March, 2010.

The JPO also reports that Japan is a leading country in the number of

green technology patent applications filed, with approximately 40,000 applications published in 2014, 2,150 applications published in January 2015, and 1,000 applications published in February 2015 related to energy, resource saving, the environment, and/or society’s infrastructure. Given the disparity between the numbers of green technology applications and the numbers of accelerated examination requests, it appears the JPO’s accelerated examination may be underutilised.

In addition, green technology companies can now choose the JPO as an International Searching Authority (ISA) and International Preliminary Examining Authority (IPEA) for international applications filed at the USPTO. As of 1 July, 2015, the JPO may act as an ISA and IPEA, provided that:



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- (1) The application is submitted in the English language
 - (2) The claims of the application are directed to the field of green technology as defined by certain International Patent Classification classes
 - (3) The JPO has not received more than 5,000 international applications from the USPTO during the three-year period from 1 July, 2015 to 30 June, 2018, not more than 300 applications per quarter during the first year, and not more than 475 applications per quarter during the second and third years
- Electing the JPO instead of the USPTO as the ISA reduces the international search fees owed, and provides applicants interested in obtaining patent protection in Japan earlier insight into how the JPO views their invention. This option is projected to end on 30 June, 2018.

South Korea

The Korean Intellectual Property Office (KIPO) launched a fast-track examination programme on 1 October, 2009 for applications related to certain green technologies. Green technologies eligible under the programme include air pollution prevention, noise prevention, water quality, waste disposal, livestock waste management, recycling, and sewage. Other green technologies are also eligible if the invention received financial support or certification from the government. Applicants must also submit results of a prior art search to participate in the programme. KIPO states that a first office action will be issued within one month of requesting fast-track examination. It is estimated that no more than 69 applications were fast-tracked under the programme in 2015. In addition, applications

related to the “prevention of pollution” also qualify for accelerated examination under a separate regulation. In 2015, 232 requests for accelerated examination were accepted under this regulation.

Taiwan

On 1 January, 2014, the Taiwan Intellectual Property Office began expedited examination of green technology applications. Applications must be an invention patent and published prior to requesting expedited examination. In order to qualify as a green technology, the technology must be related to energy saving, new energies, automobiles powered by new engines, or carbon reduction. As of September 2016, more than 100 applications have been expedited under the programme. In 2016, the average time to issuance of a first office action was approximately 103 days, much shorter than the 29 months it can take under regular examination. The majority of applications in the programme are owned by Taiwanese entities, with one of the top corporate applicants being Green Cellulosity Corp. in the field of biofuels.

UK

On 12 May, 2009, the UK Intellectual Property Office created a “Green Channel” programme whereby applicants can request accelerated processing of an application by indicating

- (1) How the application is environmentally-friendly
- (2) Which actions to accelerate (i.e., search, combined search and examination, publication, and/or examination)

The programme applies to existing applications and applications filed after 12 May, 2009. A searchable public database of published

applications in the Green Channel programme is available. As of 8 March, 2017, the database contains over 1,600 applications.

US

The Green Technology Pilot Programme for expediting examination of clean technology applications closed in 2012, with more than 1,050 patents issued under the programme. Even though the successful programme closed, other accelerated examination options applicable to all technologies are still available for clean technology applications.

One option is the USPTO’s Prioritised Examination Programme (Track One). Under the Track One programme, an application is advanced out of turn for examination upon payment of a \$4,000 (€3,750) petition fee and a \$140 processing fee, reduced for qualifying small entity and microentity applicants. A maximum of 10,000 requests are granted under Track One per fiscal year, and 9,360 requests were filed between March 2016 and February 2017. Currently, the average time until issuance of a first office action is 2.1 months under Track One, and the average time until allowance is 5.2 months.

Other programmes for expediting examination include the Patent Prosecution Highway, First Action Interview Pilot, After Final Consideration Pilot 2.0, Pre-Appeal Brief Conference, Expedited Patent Appeal Pilot, Quick Path Information Disclosure Statement Pilot, Collaborative Search Pilot, Petition to Make Special, Ombudsman Program, and Accelerated Examination.

PCT

The Patent Cooperation Treaty (PCT) assists applicants seeking international patent protection. The PCT is

administered by an agency of the United Nations called the World Intellectual Property Organization (WIPO). Under the PCT procedure, a single patent application is filed at a single patent office in one language. The PCT application is then examined by an International Searching Authority and transmitted to each country in which a patent is desired. Accordingly, the PCT greatly simplifies the process of filing applications and obtaining patents in many countries.

In view of the growing number of different national programmes, WIPO has considered implementing a standardised global system for fast-tracking clean technology applications, whereby a single set of rules would apply to all countries offering fast-track examination. While such a system would likely simplify the process and encourage greater participation, it has not yet been implemented.

Summary

In view of the numerous international opportunities for accelerated examination and the importance of clean technologies, patent applicants should carefully consider these expedited options as part of a global intellectual property strategy to patent their bio-based innovations and bring them quickly to market. ●

For more information:

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