JICLT
Journal of International Commercial Law and Technology
Vol. 8, No.4 (2013)

# Improving Patent Quality through Pre-grant Opposition in Thailand

**Wanwipar Puasiri**
Registered Patent Agent and Instructor at
School of Law, Bangkok University
Bangkok, Thailand
wanwipar@hotmail.com

**Abstract: .** Quality control in granting patents is a strong concern nowadays because granting patents without effective quality control will lead to negative spillover effects on competition, innovation, and the economy and adversely affect the public interest. More often than not, patent quality suffers from a poorly conducted examination process arising from lack of resources and information. Further, overburdened patent offices are another factor in low-quality patents. Pre-grant and post-grant opposition help in overcoming these problems by allowing third parties or interested persons to monitor patentability subject matters. Only innovations with valuable technology are worthy of receiving exclusive protection under patent law. Because each type of opposition has its relative merits and demerits, a country that wants to adopt the opposition process must take all factors into account including its domestic patent law. Thailand is one of the developing countries located in South East Asia that has adopted a pre-grant opposition system. In place for several years, it has seen plenty of oppositions and patent application appeals. This article considers the efficiency of the pre-grant opposition process in decisions of the Thai Board of Patents. An in-depth examination and analysis undertaken in the article points to the fact that although patent quality is in the eye of the beholder, pre-grant opposition proceedings in Thailand, when incorporated in legislation, increase patent quality, in return bettering innovation for the public benefit.

## 1. Introduction

Patent quality is of concern when granting a patent since patents can affect trade and competition in the market in several ways. If a patent office grants a patent to an uncomplicated invention, and the patent holder abuses his patent right by forbidding others from reproductions of such inventions/products, consumers who need to use such products will have to buy the product from only one vendor. Finally, that vendor will dominate the market. It can set up price for goods and exclude competitors from trading in the same market. The result is even worse in the case of pharmaceuticals because the sole owner of a patented medicine can fix prices as high as it wishes. When the price of medicine is high, poor or even many middle class people in developing countries cannot afford to pay for the drug. As a consequence, people who cannot access the required medicine will fall sick and disease mortality rates will increase. Therefore, patent quality has a tremendous influence on matters of public health and safety, with particular ramifications on underdeveloped and developing countries. The patent opposition procedure exists not only to protect the right of interested persons to claim novelty in their inventions but also to allow patent offices to examine whether an invention possesses novelty, an inventive step, and industrial applicability. Moreover, the patent opposition process also considers patent quality, which can prevent many problems that would otherwise ensue.

The patent opposition procedure was introduced in Thailand in 1979 following international treaties. Thailand chose to adopt a pre-grant opposition procedure, which has proved greatly useful to the patent registration system in Thailand, as evidenced in several decisions of the Board of Patents as explored in the following. First, the author introduces the importance of patent quality and the patent oppositions system in Thailand as background for an analysis of the trends and effectiveness of patent opposition in numerous decisions of the Board of Patents and the Central Intellectual Property and International Trade Court, including the Supreme Court. A thorough explanation of the pre-grant and post-grant opposition system then follows prior to an overview of the patent system in Thailand. An understanding of the patent

opposition system is essential in order to analyze how it benefits Thailand, especially regarding improved patent quality. Consequently, readers will understand the system of patent opposition in Thailand and its advantage as a whole.

## 1.1 Introduction to Patents

A patent is a monopoly right granted to the inventor/applicant to protect various types of inventions/discovery. The requirements for granting patents are laid down in TRIPS. Any member country having enacted patent legislation must comply with the treaty. Generally, a patentable subject must be a subject matter that (1) is novel/new, (2) has an inventive step/is non-obvious, and (3) is capable of an industrial application/useful.1 Once a patent is granted, it gives monopoly right against all others in making, using or selling the invention for the duration of the patent, which lasts a maximum of 20 years from the date of the application.2 As for the general procedure in national or regional patent offices, once a patent application is submitted, the offices shall (1) determine that the novelty possessed by the innovation as referred to in the application did not exist before the date it was filed and (2) confirm via review of prior art3 that details appearing in the application are not similar to any information contained in prior patents. Subsequently, having passed the first stage, the approved application will pass to the examination process.4 Examiners then consider the patentability of the application. If the application passes the examination process, it will be published in patent journal as a granted patent. Third parties may bring opposition either before or after the examination process depending on patent registration system.

It must be noted that examiners play an important role in examining the patentability requirements, particularly as to whether the innovations are up to standard and valuable enough to monopolize a particular field of science and thereby restrict the benefit to the public from the innovations for 20 years, as the patent for the Microsoft Windows© operation system's automatic shutting down has done.[5] The criteria of "having an inventive step/non-obvious" and "capable of an industrial application/useful" are very subjective and depend on the examiner's opinion. A certain innovation may be granted a patent in one country but may be rejected in another. The opposition process eases the task of examiners by allowing third parties to bring useful information related to the application, such as prior art inaccessible to under-resourced or overburdened examiners. In order to improve the quality of a patent, the opposition process is necessary.

## 1.2. Patent Quality: Causes for Concern

The patent applicants, their competitors, lawyers and patent offices are greatly concerned about patent quality since the grant of a patent has spillover effects on the economy, public interest, business entrepreneurs, competition and development of innovations.[6] As a patent gives an absolute right to patentees for 20 years, it can lead to monopolization of inventions, which can obstruct the opportunity of other innovators to receive patents for similar innovations. Low quality patents should be revoked for public interest.

---

*The author feels greatly indebted to the Legal Office of the Department of Intellectual Property, Ministry of Commerce of Thailand who has kindly provided all recorded decisions of the Board of Patents from its beginning until now to the author.

[1] Regarding the differences in language between requirements of patentability in US Patent law and UK Patent Act *See* P. Torremans, Holyoak & Torremans Intellectual Property Law, 5e, Oxford: Oxford University Press, 2008, p.53, and The Patents Act 1977 (as amended) <http://www.ipo.gov.uk/patentsact1977.pdf > accessed 14 December 2011, and United States Patent and Trademark Office (USPTO), Patentability, <http://www.uspto.gov/web/offices/pac/mpep/documents/2100.htm#chap2100> accessed 24 December 2011

[2] W. Cornish and D. Llewelyn, "Intellectual Property: Patents, Copyright, Trade Marks and Allied Rights, 5e, London: Sweet & Maxwell, 2003, p.7

[3] "*Prior art* means anything published before a filing date of patent which describes the same or a similar invention." (Arnound Engelfreit, an IT lawyer)

[4] C. Dent, Decision-making and quality in patents: an exploration [2006] 28 EIPR 381 at 381

[5] Gruener, Wolfgang, ConceivablyTech, "Microsoft Patent Operating System Shutting Down", September 1, 2010, <http://www.conceivablytech.com/2530/products/microsoft-patents-operating-system-shutdown#idc-container> accessed 20 March 2012

[6] T.H. Stanton et al., US Patent and Trademark Office: Transforming to meet the Challenges of the 21st Century, Washington, DC: National Academy of Public Administration, 2005 p. xxii

Jacques Combeau concluded the definition of quality patents as "valid patents which may be reliably enforced in court, consistently expected to surmount validity challenges and dependably employed as technology transfer tool".[7] As such, patents of low quality generally do not involve inventive technological advancements, have the propensity to face legal challenges,[8] and cannot be reliably enforced in court. Moreover, low quality patents exploit the patent system by enabling the filing of low-probability but high-cost applications, leading to private enforcement schemes and revocation.[9] The consequences of low patent quality adversely impact the public interest due to costs involved in the granting of low quality innovations, raising monopolization of innovations, the degradation of technological impact and the cost of litigation involved in invalidating such patents. Consumers generally pay the cost. The economy also suffers since low-quality patents limit competition. Nonetheless, private interest tends to override public interest, negating the very purpose of the patent system.

As mentioned by Malackowski and Barney, "Patent quality is often believed to be in the eye of the beholder".[10] It is difficult to prove whether patent quality is high or low given that people have different standards in judging novelty. Nonetheless, merely trivial improvements and dubious inventions demonstrate low-quality patents. Examples of infamous low-quality patents are those for "one-click online payment system"[11] and "peanut butter and jelly sandwich."[12] If not obvious, these inventions show steps whose inventiveness is dubious.

Another method to evaluate patent quality is to compare the ratio of patents granted to patent applications in national or regional offices. Data analysis seems to indicate that patent offices around the world are approving a higher number of applications than in the past.[13] For example, the USPTO official statistics from 2001 to 2004 show that it has approved 70 percent of applications[14] and the number of patent applications has risen every year, with a notable increase in 2010.[15] The number of patents granted in Japan also increased by 23 percent from 2007 to 2010.[16] With the use of accelerated patent examination systems in many patent offices, such as the US Patent and Trademark Office (USPTO) and the Japan Patent Office (JPO), the issue of patent quality has become crucial. Moreover, the USPTO spends approximately 61 months in total on average patent application for the whole patent procedure.[17] More than 1.2 million applications were pending at the end of 2009.[18]The USPTO devotes a great amount of time to the examination process to make sure that the patents it grants are worthy. The opposition process can help the workload of examiners and shorten the examination period by serving as the first scan for prior arts to test for novelty and inventive step patentability.

Below is a graph demonstrating the percentage of patents granted from 2001 to 2010 in three major patent offices: the USPTO, the JPO, and the European Patent Office (EPO). Apart from the EPO, the grant of patents is on the rise. From 2005 to 2010, the JPO continuously increased its grants of patents, as

---

[7] Jacques Combeau, Patent Quality: What do you mean? Amsterdam: FICPI/AIPLA Colloquium, 2007, <http://www.ficpi.org/library/07AmsterdamColloqu/5-Combeau_revised.pdf> accessed 14 December 2011

[8] T.H. Stanton, *op. cit.*, p.62

[9] Wagner, R. Polk, *Understanding Patent Quality Mechanisms*, Draft of January 6, 2009, < http://www.ftc.gov/bc/workshops/ipmarketplace/apr17/docs/rwagner2.pdf> accessed 15 December 2011

[10] J. E. Malackowski and J.A. Barney, What is Patent Quality? A Merchant Banc's Perspective, Les Nouvelles, June 2008, p. 123

[11]T.H. Stanton, *op. cit.*, p.62

[12] J. E. Malackowski and J.A. Barney, *op. cit.*, p. 124

[13] J.R. Thomas, Does Patent Quality Matter? Washington, DC: IPO Conference, 2004, p.1 <http://www.ipo.org/AM/Template.cfm?Section=IPO_Patent_Quality_Conference&Template=/CM/ContentDisplay.cfm&ContentID=8712> (14/12/2011)

[14] J.R. Thomas, *op. cit.*

[15] In 2010, the number of patent granted by the USPTO was approximately 46.96% of all patent applications. U.S. Patent Statistics Chart Calendar Years 1963 – 2010, < http://www.uspto.gov/web/offices/ac/ido/oeip/taf/us_stat.htm> accessed 14 December 2011

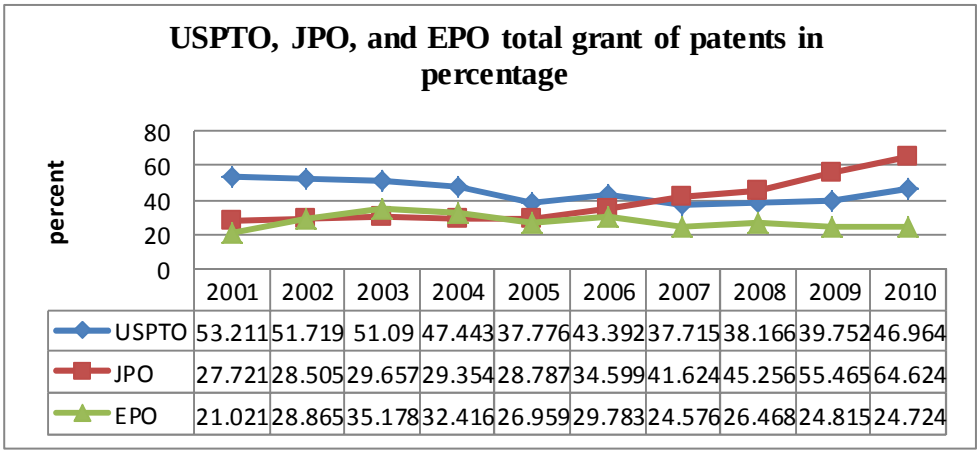
[16] A calculation of patent registrations compared to patent applications per year according to statistics provided by the Japan Patent Office. Patents were granted approximately 27% in 2001, 29% in 2004, 34% in 2006, 42% in 2007, 45% in 2008, 55% in 2009, and 65% in 2010

Outline of the Annual Report 2011, Part 5: Statistical Data, Tokyo: Japan Patent Office, 2011 <http://www.jpo.go.jp/shiryou_e/toushin_e/kenkyukai_e/pdf/annual_report2011/part5.pdf > accessed 14 December 2011

[17] S.M. Hankins and D.C. Ohly, Patent Reform 2011: The Most Significant Change in Patent Law in 50 Years, Intellectual Property Group Update, Schiff Hardin LLP, 29 September 2011

[18] S.M. Hankins and D.C. Ohly, *op. cit.*

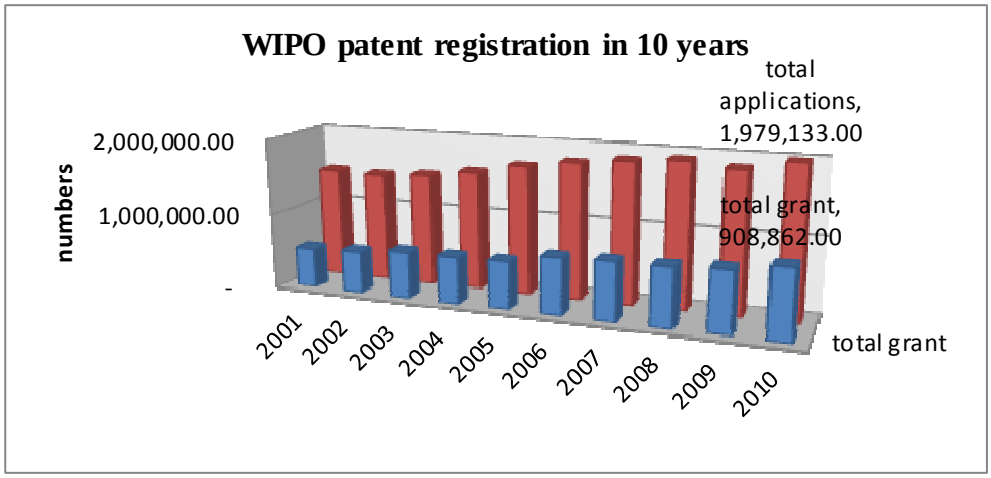
shown in the steep rise in the graph below. Its grants of patents in 2010 were approximately 30 percent higher than those in 2005. From 2007, the USPTO has increased its grants of patents as well.




| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|---|---|---|---|---|---|---|---|---|---|---|
| USPTO | 53.211 | 51.719 | 51.09 | 47.443 | 37.776 | 43.392 | 37.715 | 38.166 | 39.752 | 46.964 |
| JPO | 27.721 | 28.505 | 29.657 | 29.354 | 28.787 | 34.599 | 41.624 | 45.256 | 55.465 | 64.624 |
| EPO | 21.021 | 28.865 | 35.178 | 32.416 | 26.959 | 29.783 | 24.576 | 26.468 | 24.815 | 24.724 |

(Sources: U.S. Patent and Trademark Office, Japan Patent Office, and European Patent Office)[19]

Below is a chart demonstrating the number of patent applications and patent grants by one hundred and ten national and regional patent offices around the world from 2001 to 2010, as gathered by the World Intellectual Property Organization (WIPO). As we see from the chart, the numbers of patent applications and patent grants are increasing. On one hand, the trend may reflect more research and development by innovators applying for patents. On the other, the increase in the rate of patents granted may be a sign that patent quality is suffering.




(Source: WIPO Statistics Database)[20]

Therefore, the registration and examination system for granting patents needs good resources and regular improvement to maintain the efficient granting of high quality patents and to increase value in excess of what patents cost society.[21] Patents must only be granted through effective quality control procedures. Most countries have introduced the opposition procedure to control patent quality, allowing third parties to object to an application regarding its patentability. Pre-grant opposition can be filed once

[19] European Patent Office, European patents and patent applications - 2010 statistics, < http://www.epo.org/about-us/statistics.html> accessed 4 January 2012
[20] WIPO, Statistics on Patent, < http://wipo.int/ipstats/en/statistics/patents/> accessed 4 January 2012
[21] R.P. Merges, As Many As Six Impossible Patents Before Breakfast: Property Rights for Business Concepts and Patent System Reform [1999] 14(2) Berkeley Technology Law Journal 577 at 584

applications are published, while post-grant opposition can be filed during a certain period after grant of patent. Both systems have their advantages and disadvantages.

## 2. Patent opposition system: Pros and Cons

Pre-grant and post-grant oppositions can overcome the problem of insufficient resources and information experienced by patent offices by allowing third parties to share prior art and other relevant information, including physical evidence as well as the testimony of experts, to determine novelty at the time of filing a patent application.[22] Opposition procedures also help to balance the interests of competitors, applicants and the public; [23]ensure that patents are granted only for well-qualified patentable inventions; reduce un patentable applications; and discourages fraudulent and repetitive claims. Questionable patents are revoked in case of post-grant opposition. Individuals and small inventors generally benefit from restricting the grant of bad quality patents to large enterprises.[24]

Additionally, the opposition procedure creates incentive among third parties and the applicant's competitors to make the opposition application accurate and convincing.[25] Successful patent opposition lessens the burden upon patent offices to examine the validity of patents, has the prospect of greatly reducing patent litigation, and can increase social welfare.[26] The system can prevent litigation in the first place as well as avoid giving rise to innovation-inhibiting licenses in technology in the low quality patents. Hence, there seem to be more gains than losses from the use of the opposition system.[27]

### 2.1. Pre-grant Opposition

Pre-grant opposition is a legal procedure by which third parties oppose a patent application after its publication but before the grant of a patent. The inventive step in the application is disclosed to the public at the time of publication in a patent gazette as well. A patent office offering a pre-grant opposition must manage publication well to reduce the chance that others will make the same or similar inventions before the applicant receives a patent. In addition, opposition allows third parties to challenge applications regarding patentability. The system ensures that the examiners are aware of essential information required for examining patents. Third parties can oppose the application on the basis of any point that examiners have overlooked. Countries that use the pre-grant opposition system include India, Brazil, Germany, New Zealand and Australia.[28] The United States is the latest country to join the pre-grant opposition system following the America Invents Act 2011. Below are some costs and benefits of the pre-grant opposition system.

#### 2.1.1. Costs

##### *Lengthy period*

The typical criticism of the pre-grant opposition is that it prolongs grant of patent. The long wait for the grant of Patent can make patentees and their licensees encounter tremendous loss through uncertainty. For example, in the pharmaceutical industry, applicants invest remarkable amounts of money to research

---

[22] R.P. Merges *op. cit.* p.613

[23] T. Adam and M. Spence, Opposition in the European Patent Office: An Underestimated Weapon? London & Oxford: Olswang/OIPRC, 2001, p.6, <http://www.usyd.edu.au/vice-chancellor/docs/underestimated.pdf> accessed 14 December 2011

[24] 15 N.B. Zaveri, Effective Mechanisms to Challenge the Validity of Patent (Pre-Grant & Post-Grant Opposition Revision of the Presumption of Validity of Patent), Geneva: WIPO, 2006 <http://www.wipo.int/export/sites/www/meetings/en/2006/scp_of_ge_06/presentations/scp_of_ge_06_zaveri.ppt> accessed 14 December 2011

[25] M.A. Lemley, Rational Ignorance at the Patent Office [2001] 95(4) Northwestern University Law Review 1525

[26] B.H. Hall, S.J.H. Graham, D. Harhoff, and D.C. Mowery, Prospects for Improving U.S. Patent Quality via Post-grant Opposition, Working Paper No. W9731, Cambridge, MA: NBER, 2003, p.13 <http://elsa.berkeley.edu/~bhhall/papers/BHH%20IPE%20May03WP.pdf> accessed 14 December 2011

[27] B.H. Hall, S.J.H. Graham, D. Harhoff, and D.C. Mowery, *op. cit.*

[28] P.C. Gandhi, TRIPS and Development of IP Laws in India: Specific Reference to the Pharmaceutical Sector, Conference on Development and Intellectual Property (IP)Sep 01-03, 2008, Geneva: WIPO, Goa

chemical combinations for potential drugs but cannot produce the drugs for sale unless they have received patents.[29] Moreover, patent applicants may become dissatisfied with the system if competitors use it as a business strategy to unnecessarily delay grant of patent.

### *Disclosure of innovations*

Another disadvantage of the pre-grant opposition is that applicants must disclose the patentable technology in innovations in order for the patent office to publish the application for potential third party opposition. The disclosure makes applicants' secrets available to the public and makes infringement easier especially given there is no patent granted yet.

### *More financial support for patent offices*

Patent office unavoidably requires more financial support because examiners must thoroughly check information in the opposition as well as prior art in other patent offices and elsewhere in the world. The fee and wages of examiners are also counted.[30]

### *Effects of unsuccessful opposition*

A pre-grant opposition system has the potential to reduce the cost of litigation. However, if the opposition is unsuccessful, the dispute may go to court anyway. At the end, the system might be regarded as useless and make third parties expend more time and money than had they just brought the case straight to the courts.[31]

## 2.1.2 Benefits

### *Prevention of grant of bad patents*

Pre-grant opposition can prevent low-quality or questionable patents. Consequently, the economy will not be harmed and competition among producers will continue fairly, with the social cost balanced since quality patents are being granted. Patentees for quality inventions also deserve to have good protection for their hard work as well as to receive proper returns.

### *Prevention of abusive applicants*

The pre-grant opposition protects the abuse of the patent system by considering applications until they are spotless and ready to be released for public use. The pre-grant opposition can discourage companies from filing applications for patents with slightly different features, such as a different color of the pill bottle for patented medicine near expiry, as has happened in the United States.[32]

### *Low cost*

Pre-grant opposition is a cheaper and faster procedure than having litigation in court.[33] The cost savings are considered to be the strongest point of the pre-grant opposition, allowing third parties the chance to invalidate the applications without having to spend a great deal of money and time in court.

### *Support for innovators*

Opposition can help individual inventors, smaller sized companies and the public, especially in regard to the pharmaceutical industry.[34] Since a patent office gives lengthy consideration to patent applications of large companies before patents is granted, expensive drugs from these companies will not be marketed

[29] N.B. Zaveri, *op.cit*.
[30] R.P. Merges, *op.cit*., p.610
[31] M.A. Lemley, *op.cit*., p.152
[32] N.B. Zaveri, *op.cit.*
[33] P.C. Gandhi, *op.cit.*
[34] N.B. Zaveri, *op.cit.*

until the patent is granted, which presents an opportunity to save millions of lives, particularly those of the poor who can find alternative drugs at a cheaper price while the patents are in process. A very good example is the case of Novartis' application for a patent for Glivec, which after being under consideration for many years was finally rejected by Indian Patent Office, enabling six generic manufacturers to continue producing medicine treating blood cancer and thereby relieving patients from the burden of high-priced medicines.[35]

## 2.2. Post-grant Opposition

As mentioned, post-grant opposition is a legal procedure in which third parties oppose the grant of a patent within a certain period after it is granted. There are many countries whose patent registration systems use the post-grant opposition, including China, South Korea, Brazil, and India.[36] The EPO has also used the system for a long time. Art. 99 of the European Patent Convention renders that any opposition to a patent must be made within nine months from the publication of the grant of patent. The US has just adopted the nine-month post-grant opposition proceeding in its reform law.[37] The law allows any challengers to oppose a patent that should not have been issued in the first place within nine months after publication. The US Congress has just issued legislation in the America Invents Act that improves the functioning of US patent system, updating it to a first-inventor-to-file system.[38] The system allows third parties to submit information related to a pending application. A disclosure of prior art will better positions the examiners to grant only high quality patents. [39]

However, anyone filing an opposition must be aware of the opposition timeframe. If the opposition period is over, filing suit is the only way to cancel a patent, exploiting time and expense of related parties unnecessarily, not to mention the adverse effect on the applicant and on society when technology cannot be used and protected in due time. The post-grant opposition can maintain the interest of related persons, including competitors, even after the grant of a patent. The process, nevertheless, has both costs and benefits. Any country that wishes to adopt a post-grant opposition system should conduct due diligence, researching established systems and comparing them thoroughly. Below are some costs and benefits of the post-grant opposition system.

### 2.2.1. Costs

#### *Undermines the credibility of patent system*

The system of post-grant opposition can be understood as an attempt to correct patents even after the grant. This can create uncertainty and confusion in patentees about the system of intellectual property

---

[35] V. Gill, Novartis loses landmark Indian patent law case, London: Royal Society of Chemistry, 2007 <http://www.rsc.org/chemistryworld/Issues/2007/September/NovartisLosesLandmarkIndianPatentLawCase.asp> accessed 14 December 2011. However, the case is beginning to force India to have pre- and post-grant opposition in harmonization with the TRIPS. And S. Chaudhuri, the larger implication of the Novartis-Glivec judgment, Economic and Political Weekly, 27 April 2013 <http://www.epw.in/commentary/larger-implications-novartis-glivec-judgment.html> accessed 27 April 2013

[36] Park, Chan, "Patent challenges in India and beyond", Intellectual Property Rights and Vaccines: Promoting R&D and Production in Developing Countries, Conference in Tokyo, Japan, 17/11/ 2009 < http://www.who.int/vaccine_research/documents/IVR_IPR_Tokyo_Session6_Park_presentation.pdf>accessed 2 January 2012

[37] The America Invents Act, *Promoting American Innovation, Creating American jobs, growing America Economy*, < http://leahy.senate.gov/imo/media/doc/PRESS-Summary-OnePager-FINAL.pdf> accessed 14 December 2011

[38] The America Invents Act, *op. cit.*

[39] The America Invents Act or Patent Reform Act 2011 is introduced by Senator Leahy. It adopts the first-to-file system for patent application and enhances damages and compensation for patentees. The law is the first major overhaul of US patent law in decades. Some view that the law favors big corporation and lessen opportunity for individuals and small companies.

For more information, see the bill at <http://www.govtrack.us/congress/billtext.xpd?bill=s112-23>;

Patent Reform Act of 2011: An Overview < http://www.patentlyo.com/patent/2011/02/patent-reform-act-of-2011-an-overview.html>; and

Lee, Timothy B., Mostly pointless patent reform bill goes to Obama for signature, < http://arstechnica.com/tech-policy/news/2011/09/mostly-pointless-patent-reform-bill-goes-to-obama-for-signature.ars>

rights.[40] Also, it can undermine the faith of the public and investors in how patents are issued and in the enforceability of property rights granted by patent offices.[41] It is also awkward for patent offices to correct their decisions about patents that have just been granted.

### *Abuse of the system by competitors*

The competitors of patentees can use the post-grant opposition as a means to ruin credibility of the patents or to obstruct the patentees. The competitors may oppose without disclosing their identity by the use of "straw man" method, [42]which abuses the opposition procedure.

### *Innovators' incentive*

No one wants to create innovations with no intellectual property right protection. The patent registration system protects innovations from being used, re-produced or sold by the others as well as giving innovators incentive to produce more works. However, the post-grant opposition process can discourage innovators, since their patents have the possibility of being revoked by the opposition even after they are granted.

### *More support for patent offices*

From a patent office's point of view, although opposition is cheaper for third parties than court litigation because the whole proceeding is conducted within the patent office with set fees and rules, patent offices need more financial support to conduct the whole procedure. Staff and examiners also face a greater workload.

### *Time limit*

Post-grant oppositions must be filed within set time limits. For example, third parties have nine months from the publication date of patent in the EPO and USPTO opposition systems.[43] Afterwards, third parties have to bring a dispute to court. Post-grant opposition cannot provide assurance that there will be no litigation, which may make third parties question whether to pursue litigation instead. Finally, a system offering post-grant opposition may lead to more litigation than one without such an option, as if there were no post-grant opposition proceeding at all, third parties could use the pre-grant opposition proceeding or go to court directly. They would not have to litigate against the grant of patent or appeal the decision of the opposition board.

## 2.2.2. Benefits

### *Improvement of patent quality*

Post-grant opposition can improve patent quality by reducing litigation costs and by ensuring only high quality patents are granted, thereby protecting the public interest and strengthening competition and the economy, with only quality patented products entering the market.

### *Friendly atmosphere*

If an opposition fails, many systems allow third parties to proceed to the revocation process. Third parties may save some expense from defending themselves in patent infringement lawsuits since the opposition process is cheaper than litigation in court. The opposition atmosphere is also less strained than revocation.

---

[40] AMPICTA, Post-Grant Patent Enforcement Strategies, Canberra: AMPICTA, 2006, <http://www.acip.gov.au/enforcesubs/AMPICTA%20-Brian%20Jones.pdf> accessed 15 December 2011

[41] J.P. Kesan, Carrots and Sticks to Create a Better Patent System [2002] 17(2) Berkeley Technology Law Journal 763

[42] M. Spence, *op.cit.,* p.19

Straw man method is referred to someone providing anonymity to any company for opposing a patent.

[43] Art. 99(1) of the European Patent Convention < http://www.epo.org/law-practice/legal-texts/html/epc/2010/e/ar99.html > accessed 15 December 2011

Patentees will not lose face at the opposition stage because the patents have only just been granted and have not yet been marketed widely.[44]

### *Benefit to individual inventers and small companies*

Post-grant opposition can delay the granting of a patent. Normally large companies that have sufficient research and technology resources and funds have a better chance to receive a patent for their innovations than individual inventers and small companies who lack of these resources and funds. The delay of patent gives them a chance to develop their innovations and receive a patent of their own during the prolonged opposition period.

As described, there are both costs and benefits for each patent opposition system. One system may suit a particular country while another may not. Thailand as a developing country in South East Asia has chosen to use the system of pre-grant opposition for its patent registration for some time. The forty-year plus history of the pre-grant opposition system in Thailand surely offers something about its efficiency and reliability for Thailand. Also, it may provide insight for other developing countries whose innovation and development of technology are still behind developed countries even as their patent law faces pressure to align with the standards of developed countries. In the following section, the author presents a thorough overview of the patent system in Thailand before analyzing key decisions of the Board of Patents.

## 3. Patents in Thailand

Thailand enacted its current patent law almost four decades ago. Over time, the Thai patent system has improved gradually. Anyone wishing to have a protection for his invention or its process or a design must register for patent at a patent office in the Department of Intellectual Property, Ministry of Commerce. While the patent registration procedure in Thailand has its unique features, it also complies with minimum standards set by relevant international treaties. There are three categories of patent registration in Thailand: invention/process patent, design patent, and petty patent. Each type of patent has different requirements, procedures and protections. Thailand, like many countries, also has a pre-grant opposition system, as discussed above. The pre-grant opposition system allows any interested person to be able to oppose a registration of a patent within 90 days after a publication date of a patent application. If an opposition is rejected by the Director-General of the Department of Intellectual Property, an appeal to the Board of Patents can be made. However, if the Board of Patents rejects the appeal, interested persons are still eligible to appeal the decision of the Board of Patents to the Central Intellectual Property and International Trade Court within 60 days after an announcement of the Board's decision. Even better, if the Court rejects the appeal, the Intellectual Property and International Trade division of the Thai Supreme Court serves as further recourse. Finally, if these measures fail and the patent office grants a patent to an applicant, the revocation process may invalidate the patent.

From this point of view, it is not wrong to say that Thailand has a good systematic patent law and strong patent opposition system. Thai patent system is worthy of study as an example of a patent opposition system that can improve patent quality domestically.

### 3.1. History of Patents in Thailand

The Kingdom of Thailand is a developing country in South East Asia. In the past, the country had never had a patent law or any public order similar to said law. The Siamese or Thai people were concerned more about living by agriculture and livestock. A century ago, there was an attempt to issue a law after the "Law on Patents" of England in the era of King Rama XI.[45] Nevertheless, the first attempt failed. Several attempts to enact a patent law followed, but all attempts were rejected or forgotten due to the World War II and insufficient expertise in patent law. Moreover, a belief that a patent law would benefit foreigners more than the Thais or that the law would restrict Thais from accessing innovations and

[44] M. Spence, *op.cit*., p.24
[45] Y. Puangraj, *Patent: Law and Practices*, Bangkok: Bo-Pit Publishing, 1990, p. 7

technology also discouraged furtherance of legislation.[46] However, the attempt to enact a patent law succeeded in 1979 when the Parliament passed the Patent Act, drafted by the Ministry of Commerce as the Patent Act B.E. 2522 (1979). The draft was written following the Paris Convention, allowing foreigners to have national treatment.[47]For example, a foreign application could be filed in Thailand twelve months after the first applications in other countries and still be regarded as novel. Albeit Thailand was not yet a party of the Convention at that time, the Patent Act set same standard for people of other nations of the Convention with the people of Thailand. Debate followed as to whether the Patent Act was beneficial for the country. .

In 1992, Thai Patent Act B.E. 2522 was amended for the first time as a sequence of pressures by developed countries especially from the U.S. The U.S. wanted Thailand to raise the standard of patent protection for American pharmaceutical companies. If Thailand did not amend the Patent Act, the U.S. indicated it would obstruct all commercial activities with Thailand.[48] Therefore, some provisions were removed while some provisions were changed to suit developed countries. For example, pharmaceutical companies could register their drugs for patents after the amendment, and a period of patent protection was increased to twenty years from fifteen years.[49]The opposition procedure was introduced for the first time in this amendment as well.

Thai Patent Act was amended again in 1999 to be in accordance with the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS). Since TRIPS set minimum standards in 1994 for many of the intellectual property regulations of World Trade Organization members, Thailand as one of the members was obliged to apply these provisions. Generally, the third version of the Patent Act induces incentive of patentee incredibly. For example, provisions for petty patent were added in Chapter III *bis* – Petty Patent while provisions for pharmaceutical patent in Part VII – Measure for Pharmaceutical Patent were removed.[50]The Department of Intellectual Property introduced a draft for the third amendment in 2006 but ratification has languished given controversy over a number of items, including a provision about removing the pre-grant opposition system and introducing a six-month revocation system. The argument continues as of the drafting of this article.

## 3.2. Overview of Patent Registration in Thailand

The patent registration system in Thailand came into being after its trademark registration system. During the reign of King Rama VI, the Trademark Registration Unit was established in 1910 under the Ministry of Agriculture to protect Thailand's trademarks and trade names in global commercial activity.[51] Thirteen years later, the King compelled the House of Lords to issue a royal command to establish the Department of Commercial Registration. The Department formed the Patent Investigation Division to hold responsibilities on patents in 1963 during the reign of King Rama IX, the current king.[52] The patent registration system was fully established in 1979 when the Patent Act of Thailand was enacted. Rules and regulations including fees for patent registrations were announced as a consequence.

As mentioned above, the Patent Act was amended twice following international treaties and forces of developed countries. The amendments made the Act and registration system accord with the patent section in TRIPs.[53] Therefore, the patent registration system in Thailand is similar to those of the other TRIPs member countries. However, differences can arise from undefined provisions in TRIPs. For example, the patent opposition system in member countries may vary since there is no opposition

[46] M. Pittayabhorn, Explanations of the Literary and Arts Protection Act, *Patent Law and Trademark Act*, Bangkok: Ramkamhaeng University Press, 1997, p. 4
[47] C. Hemarachata, Specification of Intellectual Property Law, 3rd edition, Bangkok: Nititham Publishing, p. 129
[48] C. Hemarachata, Specification of Intellectual Property Law, 3rd edition, Bangkok: Nititham Publishing, p. 129
[49] C. Anupappun, History of Patent Law in Thailand, *Pamphlet of the Department of Intellectual Property*, Issue 1, No. 1, March 1993, pp 2-3
[50] The Department of Intellectual Property, *Draft of the Patent Act B.E. … (in Thai)*, < http://www.ipthailand.go.th/info/index2.php?option=com_docman&task=doc_view&gid=208&Itemid=43>(11/6/2012)
[51] the Department of Intellectual Property, *History of the Department of Intellectual Property*, < http://www.ipthailand.go.th/ipthailand/index.php?option=com_content&task=category&sectionid=17&id=104&Itemid=183&lang=en>(11/6/2012)
[52] Ibid.
[53] Section 5: Patents of Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs)

provision mandated in TRIPs. While Brazil and Australia use a pre-grant opposition system, South Korea and the US have chosen post-grant opposition.

In the Thai patent registration system, there are three types of patent registration: invention, design and petty patent. Each type represents varied protections and requires different qualifications. Inventions that can apply for an invention patent must be novel, have an inventive step and be industrial applicable.[54] An invention patent has a twenty-year protection from the date of filing an application in the country.[55]A design patent protects an industrial design for ten years from the date of filing application in Thailand.[56]A registered design patent must be new and applied for industry and handicrafts.[57]A petty patent requires that an invention must be new and industrially applicable, [58]and is protected for 6 years from the date of filing the application in the country.[59]

Anyone who wishes to apply for patent registration must choose a type of patent that suits his invention or design. The basic factors used to consider are (1) if the subject matter is created mainly for usage without or with minor aesthetic value, the applicant should apply for an invention patent or petty patent for the subject matter; but (2) if the subject matter is created to appeal as decoration with aesthetic value taking priority over usage, applicants should seek a design patent.[60] Therefore, to choose whether an invention is suitable for invention patent or petty patent one must look at the complexity of the invention. If the invention has a complicated technique and can be industrially reproduced, the invention is suitable to be registered as an invention patent.[61]Nonetheless, a petty patent applicant may switch to an invention patent if the patent has not yet been granted, as might be desirous for an application anticipated to be rejected for lacking an inventive step. In the same way, an applicant for a petty patent may instead file for an invention patent if it is determined that the invention meets the criteria. This can happen any time before the registration of the invention or before the publication of the application under Section 28, as the case maybe.[62]However, there is no provision for a design patent application to change to an invention or petty patent application even when the design functions as an invention.[63] The design patent application must be withdrawn in order to file a new invention or petty patent application.[64]

### 3.2.1. Registration of invention patent

As for invention patent registration in Thailand, in short, an application must include a patent application form, filing fee, description of the invention, claims, abstract, drawing and any other documents as available.[65]After filing the application, if the officer finds minor errors in the application, he will notify the applicant or an agent of the applicant to correct those errors. The correction shall be done within 90 days from the date of notification. If the applicant needs more time, he shall appeal for the extension. If there is no error in the application or the error is already corrected, the officer will notify the applicant twice to pay a fee for publication within 60 days from the notification date. Failing to pay a fee will be deemed as abandonment of the application. If the publication fee is paid in a due time, the publication of

---

[54] Section 5 of Thai Patent Act B.E. 2522
[55] Section 35 of Thai Patent Act B.E. 2522
[56] Section 62 of Thai Patent Act B.E. 2522
[57] Section 56 of Thai Patent Act B.E. 2522
[58] Section 65 bis of Thai Patent Act B.E. 2522
[59] Section 65 septies of Thai Patent Act B.E. 2522
[60] The Department of Intellectual Property, *Patent Registration Process,* < http://www.ipthailand.go.th/ipthailand/index.php?option=com_content&task=view&id=168&Itemid=205&lang=en> accessed 12 June 2012
[61] Ibid.
[62] Section 65 quarter of Thai Patent Act B.E. 2522
[63] N. Indananda and S. Taweepon, "Functionality in Thai Patent Law", 8 November 2010, Tilleke & Gibbins, Available at <http://www.tilleke.com/resources/functionality-exception-thai-patent-law>
[64] See *Dcon Products Co., Ltd. v. the Department of Intellectual Property (DIP)* (The Supreme Court of Thailand, Judgment No. 9733/2552). The plaintiff wanted to register a design of an invention as a design patent. DIP rejected the application due to lack of novelty. The first court dismissed the case but the plaintiff appealed to the Supreme Court. The Supreme Court found that the invention itself had an adapted design improvement which reflected on better capability of the invention. Therefore, the invention had novelty because of its functional design. As a result, the Supreme Court opined that the plaintiff to register a utility patent for an invention, rather than a design patent.
[65] The Department of Intellectual Property, *Patent Registration Process,* < http://www.ipthailand.go.th/ipthailand/index.php?option=com_content&task=view&id=168&Itemid=205&lang=en> accessed 12 June 2012

the application will be published for 90 days for opposition by any interested person under conditions: (1) the application does not comply with the patent law; or (2) the invention belongs to opposing party.[66]

If the publicized application is not opposed during the 90 days after publication, the applicant must proceed to the examination process. The request for an examination must be submitted within 5 years of the date of publication together with the examination fee. But if the application is opposed, a competent officer will consider the opposition and counterstatement by the applicant to determine whether the invention belongs to the applicant or not. Subsequently, the officer will report on his decision to the Director-General and send the decision to both the applicant and opposing party. The decision must either reject the opposition or nullify the application. If the officer decides to reject the opposition, the applicant proceeds to the examination process, in which the subject matter is compared to prior art and assessed for its qualifications as specified by the law. A qualified application will be granted a patent after paying the registration fee; an application that does not meet the qualifications will be nullified.

**Flow Chart of Examination Process for an Invention Patent Application**


(Source: Department of Intellectual Property)[67]

### 3.2.2. Design patent registration

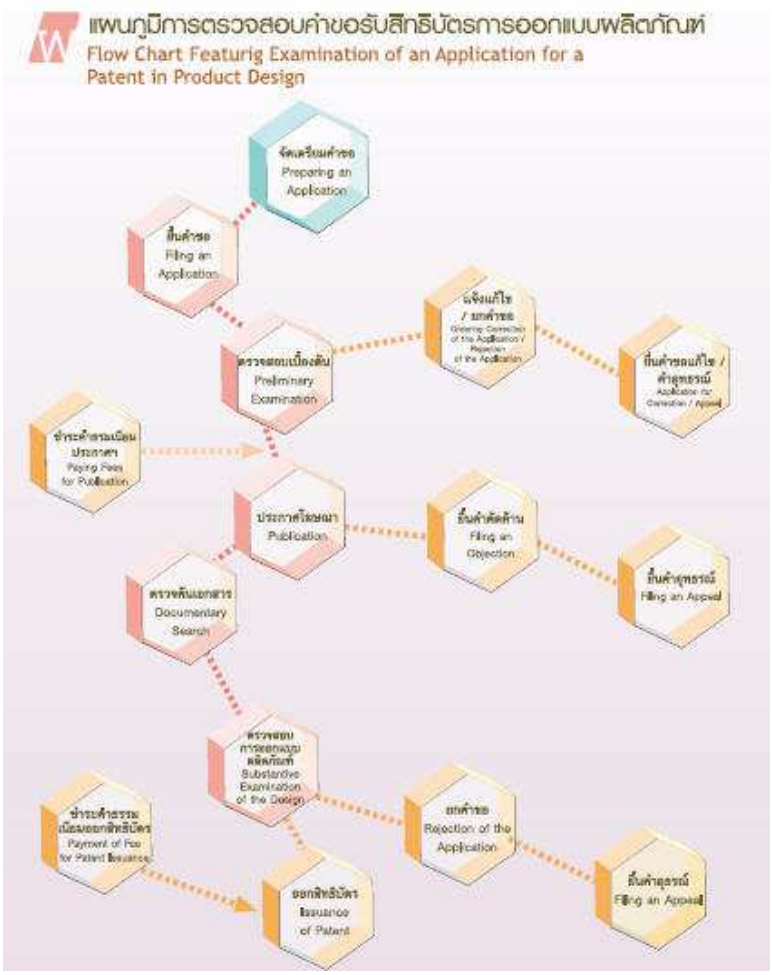
The design patent procedure is a bit different from that of an invention patent. The design patent opposition system adopts opposition provisions from the invention patent to ensure that the granted design patent has all qualities required by the law. Once submitted, a design patent application will have a preliminary examination for minor errors. If there are any errors, the applicant will be notified to correct them. Correction shall be done within 90 days after the date of notification. If the application does not have any error or the errors have already been corrected, the applicant must pay the fee for publication of the application. The officer will notify the applicant twice of the need to pay for publication fee within 60 days from the notification date. Failing to pay a fee will be deemed as abandonment of the application.

[66]The Department of Intellectual Property, *Patent Registration Process*, < http://www.ipthailand.go.th/ipthailand/index.php?option=com_content&task=view&id=168&Itemid=205&lang=en> accessed 12 June 2012

[67]The Department of Intellectual Property, Flowchart featuring for a patent for invention application, < http://www.ipthailand.go.th/ipthailand/index.php?option=com_content&task=view&id=1076&Itemid=205> accessed 16 June 2012

Interested persons have 90-day period to oppose the application under the following conditions: (1) the application does not comply with the patent law; or (2) the invention belongs to an opposing party.[68] Qualified application will be granted a design patent; while, disqualified application will be nullified.

Flow Chart of Examination Process for a Product Design Patent Application




(Source: Department of Intellectual Property)[69]

### 3.2.3. Petty patent registration

Finally, petty patent registration mirrors the aforesaid patent procedure until the error notification process. If a petty patent application does not have any errors or an applicant has already corrected those errors, the applicant will be notified to pay a registration fee. There is no opposition or examination process before the grant of petty patent. But after the grant of a petty patent, any interested person can submit a form requesting the patent be examined as to whether it complies with the law. If examiners find that the petty patent is noncompliant, the petty patent will be nullified.[70]

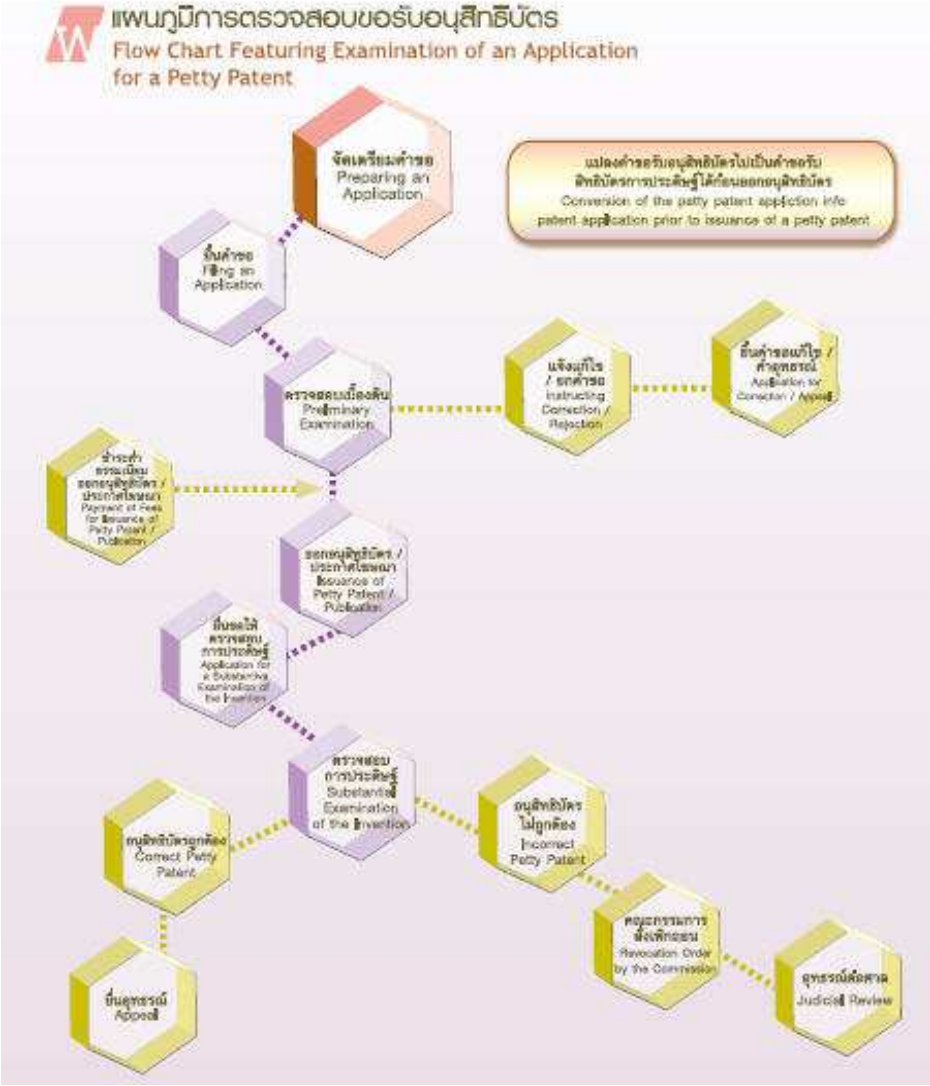
---

[68]The Department of Intellectual Property, *Patent Registration Process*, < http://www.ipthailand.go.th/ipthailand/index.php?option=com_content&task=view&id=168&Itemid=205&lang=en> accessed 12 June 2012

[69]The Department of Intellectual Property, *Flowchart featuring for a patent for product design*, < http://www.ipthailand.go.th/ipthailand/index.php?option=com_content&task=view&id=1077&Itemid=205> accessed 16 June 2012

[70] The Department of Intellectual Property, *Patent Registration Process*, < http://www.ipthailand.go.th/ipthailand/index.php?option=com_content&task=view&id=168&Itemid=205&lang=en> accessed 12 June 2012

**Flow Chart of Examination Process for a Petty Patent Application**




(Source: Department of Intellectual Property)[71]

### 3.3. The System of Pre-grant Opposition in Thailand

As mentioned above, of Thailand's patent opposition process system only serves invention and design patents. Petty patents do not have an opposition process but an interested person may request the competent office to examine the invention as to whether it has all requirements according to Section 65bis after the grant of a petty patent.[72] Thailand's Patent Act B.E. 2522 provides for invention patent opposition procedures from Section 31 to Section 34. Design patent opposition can use the same provisions *mutatis mutandis* as mandated in Section 65 of the same Act.

Opposition procedures begin with Section 28 of the Patent Act, which states that opposition of a patent application can be undertaken within 90 days after a publication date of an application. The Department of Intellectual Property publishes a gazette listing new patent applications every month.

[71]The Department of Intellectual Property, *Flowchart application for a petty patent*, < http://www.ipthailand.go.th/ipthailand/index.php?option=com_content&task=view&id=1078&Itemid=205> accessed 16 June 2012

[72] Section 65 sexies of Thai Patent Act B.E. 2522

Patent applications are also published online on the Department of Intellectual Property's website.[73]After consulting either source, anyone wishing to oppose a patent application may notify the competent officer for opposition upon the ground that he is entitled to the patent or that the application does not comply with the provisions of Section 5, 9, 10, 11 or 14.[74] Section 5 refers to subject matter in a patent application lacking in novelty, inventive step, or industrial applicability. Section 9 refers to a subject matter of patent application not patentable as listed in the Section. Section 10 refers to an inventor that has no legitimate rights to apply for a patent. Section 11 refers to an invention that an employee creates under an employment contract. Finally, Section 14 refers to an applicant who does not qualify as having a connection with Thailand. If an opposing party wishes to submit other evidence in support of his opposition, it has to submit such evidence within 30 days of the date of submission of the opposition. Otherwise, no further opposition can be submitted at the first stage until appeal. The opposing party has to pay a fee of 250 baht (THB) (approximately 9 USD) and submit the opposition within 90 days from a publication date of the application as well. Further supportive evidence of the opposition (if any) must be submitted together with a fee of 50 THB (around 2 USD) within 30 days from the date of filing the opposition.

Once the submittal period has ended, the officer will send a copy of the notice to the applicant, who then has 90 days from the date of receipt of the copy to file a counterstatement in response to the copy of the notice. The applicant may file any supportive evidence further from the counterstatement within 30 days from the date of submission of the counterstatement together with a fee of 50 THB (around 2 USD). If the applicant fails to file such counterstatement within the period of 90 days or 30 days (for further evidence, if any), he will be deemed as having abandoned his application.[75]The competent officer must notify both the applicant and the opposing party to the abandon of the application.

The aforesaid evidence in supporting of the opposition and counterstatement are buttressing evidence. The opposing party and the applicant can also introduce any evidence or file any additional statement in order to support their opposition and counterstatement in accordance with the procedures prescribed by the Director-General. As directed by Section 32, when the Director-General has made a decision under Section 33 or Section 34, receipt of the decision with given reasons will be sent to the opposing party and the applicant.[76]

If an applicant makes a request for examination within 1 year from the publication date and there is an opposition[77]in a case where the officer's examination has determined that the application and invention abide by the law and regulations of the Patent Act[78], the officer has to submit his examination report to the Director-General of the Department of Intellectual Property. Once the opposition and counterstatement are filed, the Director-General will consider whether the invention belongs to the applicant or the opposing party. If the Director-General decides that the invention is to be registered and granted to the applicant, he will order so and reject the opposition, provided that there is no appeal from an opposing party, the patent officer then has to notify the applicant to pay the fee within 60 days from the receipt of such notice. When the fee is paid, the invention will be registered and a patent will be granted to the applicant within fifteen days after the payment of the fee, but not before the expiration of period of appeal prescribed in Section 72. If the fee is not paid within the aforesaid period, the application will be deemed as abandoned. The patent must be in the form prescribed by the Ministerial Regulations.[79]

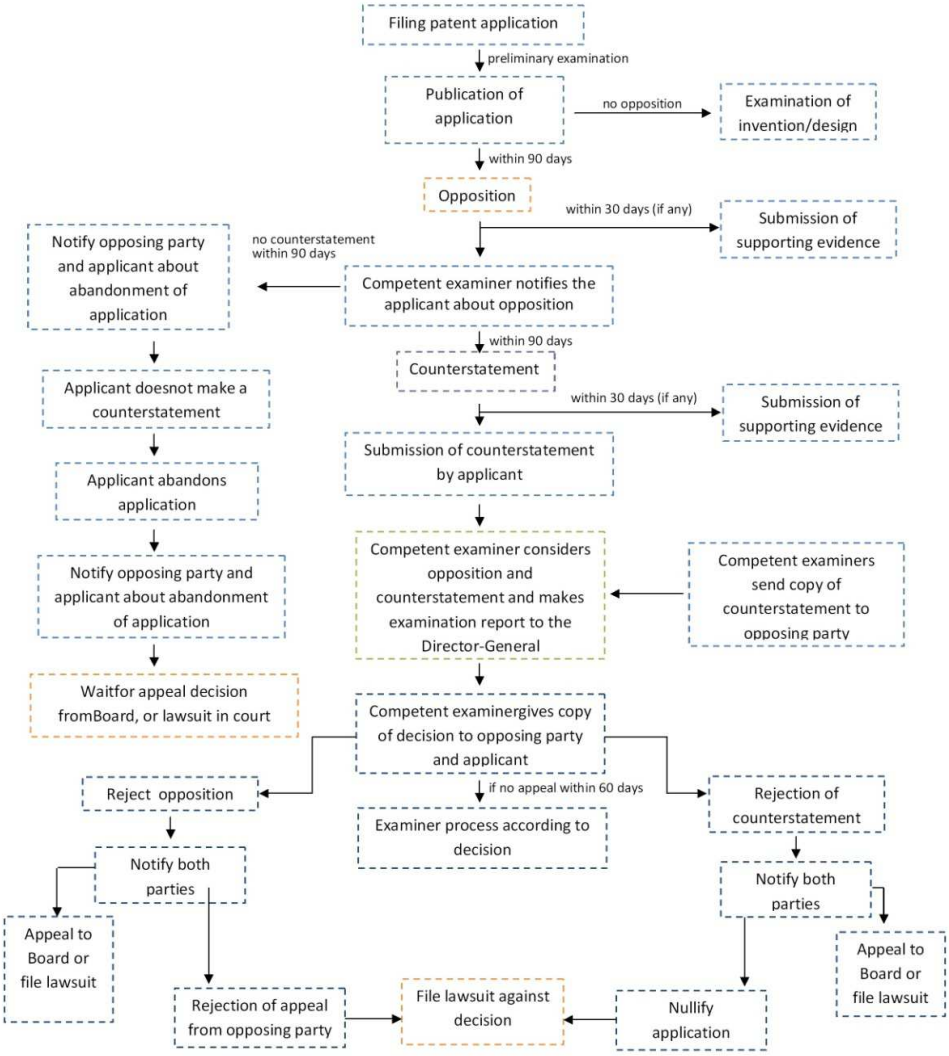
Opposing parties must appeal within 60 days after the date of notification of decision by the Director-General. If there is an appeal of the decision to the Board of Patents or the Court, the party must wait for a decision of the appeal from the Board or the Court. However, if the Director-General decides that the invention belongs to the opposing party, the Director-General will reject the application. If there is no appeal of the decision by the applicant or the Board, or the Court has made a final decision regarding the appeal, where the opposing party has filed an application for a patent within 180 days after the rejection of the application by the Director-General or from the date on which the final decision is made, as the

---

[73] The Department of Intellectual Property, Patent Publication, Available at <http://www.ipthailand.go.th/ipthailand/index.php?option=com_wrapper&Itemid=605> (The publication is in Thai only)
[74] Section 31 of the Patent Act B.E. 2522 (1979)
[75] Section 31 of the Patent Act B.E. 2522 (1979)
[76] Section 32 of the Patent Act B.E. 2522 (1979)
[77] Section 29 of the Patent Act B.E. 2522 (1979)
[78] Section 24 of the Patent Act B.E. 2522 (1979)
[79] Section 33 of the Patent Act B.E. 2522 (1979)

case may be, the opposing party will be deemed as filing its application on the filing date of the applicant, and the publication of the application of the applicant made under Section 28 will be deemed as the publication of the application of the opposing party. In the latter case, no person may oppose the application of the opposing party on the ground that such person has a better right in the invention than the opposing party.[80]

Flowchart of the Thai Patent Act Opposition Process




## 3.4. Patent System Enforcement Mechanism in Thailand

Section 36 of the Patent Act mandates that a patentee, when the subject matter of a patent is an invention, has exclusive rights to produce, use, sell, have in the possession for sale, offer for sale or import the patented product. However, if the subject of a patent is a process, the patentee has the right to use the patented process, to produce, use, sell, have in the possession for sale, offer for sale or import the product produced by the patented process. Accordingly, a patentee of a design patent also has an exclusive right to manufacture a product or to sell, have in possession for sale, offer for sale or import a product, embodying the patented design, except the use of the design is for the purpose of study or research according to Section 63 of the Patent Act.

[80] Section 34 of the Patent Act B.E. 2522 (1979)

If anyone who does not have permission from a patentee performs actions that a patentee has an exclusive right in, that person commits an infringement of a patent. Thailand has provisions for patent infringements in Chapter VI of the Patent Act B.E. 2522. Penalties for offenses include fines and imprisonment. Section 85 reads

> *"Any person who commits any act under Section 36 or 63 without the permission of the patentee shall be punished with imprisonment not exceeding two years or a fine not exceeding four hundred thousand baht or both."*[81]

To enforce the law, a patentee or any interested person can file a lawsuit with the Central Intellectual Property and International Trade Court (the Court) within a prescribed time limit.[82] There are 5 types of lawsuits regarding patents.[83]The first covers violation of patent in a civil case to claim for compensation. The second regards revocation of a patent. The third involves cancellation of a decision or order of the Board of Patents. The fourth involves executive orders of the Prime Minister in relation to patents during a state of war or emergency.[84] The fifth covers cases where many persons have invented the same invention individually according to Section 16.

In case of patent opposition, if any party does not agree with a decision of the Board of Patents, that party has a right to appeal the decision of the Board of Patents to the Court within 60 days from the date of receipt the decision of the Board. If there is no appeal to the Court within 60 days, the Board of Patents' decision is final. However, if there is an appeal to the Court within 60 days but the Court also decides in agreement with the Board of Patents, the party can appeal the judgment straight away to the Intellectual Property and International Trade Division of the Supreme Court within 1 month from the date of publication of the judgment. The party does not have to bring the case to the Court of Appeal before passing the case to the Supreme Court because Thailand regards intellectual property and international trade cases as special cases requiring a speedy and convenient process.[85] When the Supreme Court makes a judgment, the judgment is final. Further details about the appeal procedure to the Supreme Court are as follows: in criminal cases in which penalties involve no more than 3 years imprisonment or a fine not exceeding 60,000 THB, the party is forbidden to appeal in factual questions, except where the judgment has already ordered imprisonment or a 5,000 THB fine. In civil cases, if the price of property or disputed asset is below 200,000 THB, the party is forbidden to appeal in factual questions, except where is a dissent opinion or certified letter from a trial judge or the chief judge of the Court allows the appeal in writing.

Nevertheless, the opposition via the Patent Office is not the last means to obstruct patent registration. Even after patent registration, there is also a procedure to cancel the patent by the Court. For invention patents, Section 54 of the Thai Patent Act provides that

> *Any patent granted not in compliance with the provisions of Section 5, 9, 10, 11 or Section 14 shall be invalid.*
>
> *The invalidity of a patent may be challenged by any person. A petition to cancel an invalid patent may be submitted to the Court by any interested person or the public prosecutor."*[86]

---

[81] Section 85 of the Patent Act B.E. 2522 (1979)

[82] For further information read P. Aimaot, "Limitation to prosecute an Intellectual Property case" (in Thai), Suan Dusit Rajaphat University, Available at <http://sdubi.dusit.ac.th/mai/com/academiacivil004.pdf> accessed 3 April 2013

[83] P. Aimaot, "Limitation to prosecute an Intellectual Property case" (in Thai), Suan Dusit Rajaphat University, Available at <http://sdubi.dusit.ac.th/mai/com/academiacivil004.pdf> accessed 3 April 2013

[84] Section 52 of the Patent Act B.E. 2522 (1979) reads "During a state of war or emergency, the Prime Minister, with the approval of the Cabinet, shall have the power to issue an order to exercise any right under any patent necessary for the defense and security of the country by paying a fair remuneration to the patentee and shall notify the patentee in writing without delay.

The patentee may appeal the order or the amount of remuneration to the court within sixty days from the receipt of the order."

[85] The Central Intellectual Property and International Trade Court, About Us (in Thai), Available at <http://www.ipitc.coj.go.th/info.php?info=about> accessed 28 March 2013

[86] Section 54 of the Patent Act B.E. 2522 (1979)

Therefore, any patent if not granted in compliance with the provisions of Section 5, 9, 10, 11 or Section 14 will be invalid. Any person can challenge the Director-General about an invalid patent. Then the Director-General can request the Board of Patents to cancel the patent. Otherwise, any interested person or the public prosecutor can submit a petition to the Court to cancel an invalid patent. In case the Court disagrees with such person or the public prosecutor, the party still can appeal a judgment to the Supreme Court. Moreover, the Director-General can request the Board to cancel a patent in particular circumstances as prescribed in Section 55 of the Patent Act. The invalid patent refers to a patent that is (1) a non-patentable invention,[87] (2) an invention which cannot have a protection under the law,[88] (3) a patent whose patentee is not the inventor who has a right to apply for the patent,[89] (4) a patent whose patentee does not have a right to apply for the patent due to an employment contract,[90] or (5) a patent submitted by an applicant whose qualifications do not agree with the prescribed conditions of a patent applicant, such as not having a Thai nationality.[91] However, an interested person includes anyone who would be affected or damaged by the grant of such patent.[92]

For a design patent, Section 64 of the Patent Act allows adoption of cancellation provisions in Section 54 such that any interested persons or the public prosecutor can file a petition to cancel a design patent to the Court if the design is not new and not eligible to register as a design patent as prescribed in Section 58. Section 58 sets rules that a design conflicting with public moral or a design mandated in Royal Decree cannot be a design patent. Moreover, Section 64 also adopts provision of Section 10, 11, and 14 involving subject matter unregistrable as an invention patent. In short, a design patent is unable to be registered if (1) a patentee is not a creator of a design who has a right to apply for the patent per Section 10, (2) a patentee does not have a right to apply for the patent due to an employment contract per Section 11, or (3) an applicant's qualification does not abide by Section 14; for instance, an applicant does not have Thai nationality.[93]

### *The Central Intellectual Property and International Trade Court*

The Central Intellectual Property and International Trade Court specializes in intellectual property and international trade disputes. Established in 1996, the Court deals with Intellectual Property and International Trade related cases only. Its judges and officers are more familiar with Intellectual Property than other courts, leading to more accurate decisions. Its specialized judges use their ultimate discretion to consider patent and other intellectual property disputes. Therefore, the Court has become a last hope for applicants and opposing parties in registering or canceling a patent. The Court is located in Bangkok but has jurisdiction over the entire country for cases related to intellectual Property. Nevertheless, if an interested person cannot travel to the Court in Bangkok to file a case, any court in Thailand can accept patent oppositions under Section 54 of the Act. Of course, only cases truly deemed to involve intellectual property are forward to the IP&IT Court.[94]

## 4. Analysis of Key Patent Oppositions in Thailand

The opposition system plays an important role in restricting bad or poor quality patents in Thailand although, somehow, it has not been of much help in the case of pharmaceutical patents. Nevertheless, pre-grant opposition is better than post-grant opposition and revocation because pre-grant opposition allows the patent office to shield itself from cancellation of a patent and even to control patent quality before any patent is issued. Thailand is one of the countries employing a pre-grant opposition system with a period of 90 days after a publication of an application. The pre-grant opposition system has obstructed bad patents in Thailand, which is beneficial to consumers and inventors. The opposition system is very essential for consumers; if poor quality drugs can be patented and sold for high prices, many patients will not be able

[87] Section 5 of the Patent Act B.E. 2522 (1979)
[88] Section 9 of the Patent Act B.E. 2522 (1979)
[89] Section 10 of the Patent Act B.E. 2522 (1979)
[90] Section 11 of the Patent Act B.E. 2522 (1979)
[91] Section 14 of the Patent Act B.E. 2522 (1979)
[92] C. Hemarachata, Specification of Intellectual Property Law, 3rd edition, Bangkok: Nititham Publishing, p. 177
[93] Section 14 of the Patent Act B.E. 2522 (1979)
[94] The Central Intellectual Property and International Trade Court, About Us (in Thai), Available at <http://www.ipitc.coj.go.th/info.php?info=about> accessed 28 March 2013

to access the drugs, which is unfair to both consumers and drug inventors. In a relevant case, the Board of Patents rejected an appeal from a patent applicant from the appeal of opposition in Decision No. 1/2554, resulting in broader access to a generic medicine by the public. The Board ruled Novartis AG's invention patent involving integration of an organic compound in an enhancing flow of insulin drug was similar to a U.S. patent and the integration of organic compound did not show any distinctive improvement in terms of efficient treatment of disease. Therefore, the appeal to the Director-General was dismissed and the application was nullified.[95]

Below we explore examples of both failed and successful opposition cases to assess the efficiency of the pre-grant patent opposition in Thailand. The Legal Office of the Department of Intellectual Property has kindly distributed the examples, which include oppositions of a wide range of patents from 1994 to 2011.

## 4.1. Failed Oppositions

### 4.1.1. Initial decisions involving failed patent opposition

The first failed pre-grant patent opposition was recorded in 1996. It was a case of a design patent application for a chair. In the Board of Patents' decision 10/2540, [96]the Director-General of Department of Intellectual Property concluded that an application for a design patent was different from the one described in the opposition because the latter had already published in magazine "LAYOUT" in Italy since 1975. The opposing party appealed, but the Board of Patents upheld the decision of the Director. As a result, the opposition was rejected.

The next failed opposition case was Decision No. 2/2541,[97] involving an invention patent application by an employee of the National Science and Technology Development Agency (NSTDA). In the decision, the applicant applied for an invention patent for a silicon-oxide generator from rice-husk but the NSTDA opposed the application with the ground that the applicant had no right to apply for the invention due to his employment contract with NSTDA. The applicant filed a counterstatement that the invention was not invented under an employment contract and the invention was different from what the applicant had to do under the employment contract. The Board of Patents agreed that the silicon-oxide generator inventions belonging to the inventor and to NSDA were different in substantive parts. As such, the Board rejected the opposition. The NSTDA appealed the decision but the Board of Patents upheld its decision, reasoning that the applicant applied for an invention that was dissimilar to the invention in which NSTDA had a right. Therefore, the appeal of the opposition was also rejected.

In Decision No. 1/2548[98]regarding a fire-extinguishing ball invention, an opposing party claimed that the application did not have an inventive step and that it had a better right than the applicant. In 2003, an applicant had applied for a patent for a fire-extinguishing ball, a ball containing chemical substances that can extinguish fire. The ball was designed to use conveniently, self-activating with three seconds once in contact with fire. The Board of Patents did not agree with the opposing party's arguments and rejected the opposition. Although the opposing party appealed the decision, the Board of Patents did not agree with the appeal and upheld the Director's decision.

From the examples of the decisions above, many cons of pre-grant opposition can be found. Pre-grant opposition may serve as a method to prolong the grant of patent and exploit time unnecessarily. For example, the opposing party in the extinguish-a-fire ball decision merely prolonged the grant of patent by filing an unreasonable opposition and appeal. As well, the in the NSTDA decision, if NSTDA would have controlled its employee and any research and development resulting from the work created under employment, the Patent Office, the Board of Patents and the applicant would not have to waste their time considering the opposition.

Also, considering similarity is very subjective. Once an opposition is made, the Director-General and the Board of Patents may view similarities of an invention in an application and an invention raised by an opposing party as different or alike subject to attitude, experience and specialization of the individual examiner. Therefore, improving patent quality requires not only the opposition procedure but also that

[95] Decision of Thai Board of Patents No.1/2554
[96] Decision of Thai Board of Patents No.10/2540
[97] Decision of Thai Board of Patents No.2/2541
[98] Decision of Thai Board of Patents No.1/2548

officers and examiners of the patent office including the Director-General of Department of Intellectual Property and the Board of Patents should also be efficient and able to consider a decision with reasonable discretion.

### 4.1.2. Unusual Decisions

The next decision under consideration is No. 2/2548.[99] An applicant sought a patent for an instant cement mixture, but Kittipong Mining Co. Ltd. opposed the application based on similarity of mixture ingredients to prior art. The Director-General considered the application, opposition, counterstatement and all evidence. He concluded that the applied invention had a different mixed cement percentage from the opposing one. As a consequence, the applied invention was new and had an inventive step, resulting in the rejection of the opposition.[100] This case was a bit awkward because the Director-General rejected the opposition but the opposing party did not appeal. However, when the application proceeded to a substantive examination process, the Director-General rejected the application, reasoning that the application was similar to US patents. The applicant appealed to the Board and the Board reversed the decision of the Director-General. Thus, pre-grant opposition is not always the last chance to correct patent quality. It is essential that staff and officers at the patent office must do their best to examine, consider documents and have good discretion in order to control the quality of patents.

### 4.1.3. Rejection of Oppositions and Appeals by the Director-General and the Board of Patents

There are many decisions where the Director-General has rejected the opposition and the Board of Patents has upheld a decision of the Director-General. The author thinks that main reason for failed oppositions is because they are not efficient enough. For instance, in Decision No.1/2549[101], the Director-General rejected the opposition and the Board of Patents also upheld the decision of the Director-General simply because a method used to preserve rice by the applicant was new and had an inventive step. This decision also showed that the failure of the opposition came from insufficient reasons used to oppose the application. Yet, Decision No. 21/2549[102] demonstrated an absurd ground for rejection. The Director-General rejected the opposition because the opposing party did not oppose within 90 days from the date of publication of the application. But later on, the Board found in the appeal of the opposing party that the opposition was in fact filed within 90 days from the publication date. It is shameful that the Director and the Patent Office could not assess the dates correctly. In Decision No. 20/2549[103], the opposition failed because the opposing party did not raise the expiration of patent application to the Director-General. Moreover, the opposing party could not convince the Director and the Board that the differences between the stamp design of the applicant and that of the opposing party were only minor changes that did not make the design in the application novel. This rejection of an opposition and its appeal demonstrates errors of the opposition and opposing party as well, in particular regarding correcting dating.

---

[99] Decision of Thai Board of Patents No. 2/2548

[100] However, when the application proceeded to the process of substantive examination, the Director-General rejected the application because the invention was almost identical to US Patent No. 4021257 and US Patent No. 3243307.The applicant appealed the order of the Director-General to the Board of Patents, who considered all materials and evidence and decided that the applied invention had an inventive step distinguishable from the US Patents because the proportion of cement mixture in the applied invention was less than the US patents. The application therefore proceeded to the registration process.

This decision was complicated by the opposition's failure to perform a thorough quality check of the patent, which the Director-General subsequently did. While the opposition did not successfully perform its job of rechecking the quality of the patent and the application thus passed on to the opposition process to a substantive examination process, the Director-General then rejected the application. It is a common reflex of an applicant to file an appeal but in this and potentially other cases the appeal may save the application. In such cases, one may conclude that efficient officers and the opposition process both play a key role in assuring patent quality.

[101] Decision of Thai Board of Patents No. 2/2549

[102] Decision of Thai Board of Patents No. 21/2549

The applicant applied a patent for a pile rig. The application was opposed on the basis that the opposing party's patent was infringed. However, the Director-General rejected the opposition because the opposing party did not oppose within 90 days from the date of publication of the application. The opposing party appealed and the Board found that the opposition was filed within 90 days of the publication date but the application did not infringe the patent of the opposing party because the rig in the application was not similar to the patented rig.

[103] Decision of Thai Board of Patents No. 20/2549

### 4.1.4. Series of Oppositions

Another form of failed oppositions is a series of oppositions by one natural or legal person. Questions exist as to why an opposing party will claim that many patent applications are similar or identical to his patent or are otherwise invalid. In Decision No. 22/2549, Mr. Gonsab opposed a patent application for a flying boat claiming that the flying boat was similar to an invention in his patent application. However, the opposition was rejected because of the dissimilarity between two inventions.[104] Mr. Gonsab opposed several other patent applications with varied results. As Decision No. 12/2550 from 2007 reveals, [105] Mr. Bhuripongchai opposed a television and radio aerial patent application, claiming that the aerial in the application was similar to prior art. His opposition and appeal were rejected because the Director-General and the Board of Patents agreed otherwise. Nevertheless, Mr. Bhuripongchai opposed an application for television and radio aerial again against the same applicant in Decision No. 13/2550[106], yet, the result was still rejection because his oppositions were groundless and nonsensical.

Similarly, in 2008, as detailed in Decision No. 10/2551, [107]D.T.C. Industry Public Co. Ltd. (D.T.C.) opposed Mr. Suthipong's design patent application for a pen by claiming that the applicant copied its patents and patent application in Indonesia. The Director-General and the Board of Patents rejected both the opposition and its appeal because the design of the pen in the application and the claimed patents were dissimilar. The same results occurred in a Decision No.16/2551 and 17/2551. In Decision No. 16/2551[108] and 17/2551[109], D.T.C. again opposed an invention patent application, in this case for "fluorescent ink for the stationary based on the dispersion of pigment agent in non-aqueous solvent" of Bic Corporation of America. Similar to the prior decision, the Director-General and the Board rejected both oppositions and appeals, reasoning that the invention in the application and the claimed fluorescent ink of the opposing party were sufficiently different and that the solvent of the invention in the application had an inventive step distinct from prior arts. D.T.C. opposed Bic Corp.'s patent application again in a decision No. 18/2551[110]. The decision rendered same results as decisions No. 10/2551, 16/2551, and 17/2551 that was both the Director-General and the Board of Patents rejected both the opposition and its appeal. In this decision, Bic Corp. applied an invention patent for "non-fluorescent ink for the stationary based on the dispersion of pigment agent in no- aqueous solvent" but D.T.C. claimed that the applied invention had already existed before the application, which made the invention not novel at the application date. Bic in its counterstatement argued that its invention had an inventive step that was an advance over a general non-fluorescent and non-aqueous composition. The Director-General agreed with the counterstatement, as did the Board of Patents in the appeal stage. As a result, the application continued to the examination process.

This was not enough for D.T.C. In Decision No. 11/2551,[111] D.T.C. opposed a design patent application by B.K.L. Group Co. Ltd. (B.K.L.) for a pen, alleging that the designs of the pen in the application and its patents were very similar. However, although the Director-General rejected the opposition, D.T.C. succeeded in stopping the application in its appeal. The Board stated as its main reason for rejecting the appeal that the designs of the pens in the application and in D.T.C.'s January 1999 catalogue were closely similar, which meant that the application was similar to prior arts to the degree that one could see the applicant had imitated D.T.C.'s designs. Likewise, Decision No. 12/2551[112] rendered the same results. In the decision, D.T.C. opposed the design patent application for pen of B.K.L. The Director-General again rejected both oppositions based on dissimilarity between two designs, but the Board of Patents reversed the decision of the Director-General according to grounds similar to Decision No. 11/2551.

In our analysis, D.T.C. as a sizable manufacturer of a variety of pens, is displaying the traits of other large and powerful companies in the Thai market who seek to prevent others from registering both patents and trademarks which resemble their own products to protect their market share and lessen the opportunity for consumers to change brands. Moreover, it should be noted that a few companies dominate

[104] Decision of Thai Board of Patents No. 22/2549
[105] Decision of Thai Board of Patents No. 12/2550
[106] Decision of Thai Board of Patents No. 13/2550
[107] Decision of Thai Board of Patents No. 10/2551
[108] Decision of Thai Board of Patents No. 16/2551
[109] Decision of Thai Board of Patents No. 17/2551
[110] Decision of Thai Board of Patents No. 18/2551
[111] Decision of Thai Board of Patents No. 11/2551
[112] Decision of Thai Board of Patents No. 12/2551

the pen market in Thailand. In any case, D.T.C. has had its own patent application opposed by others as well. In Decision No. 15/2554,[113] D.T.C. applied for a patent for a pen design. Nonetheless, a Mr. Suputipong opposed the application, reasoning that the design of the applicant was similar to a disclosed design of a pen evidenced in the catalogue year 2000 of Hang Zhou Oversea Pen Co. Ltd. (Hang Zhou). The Director-General agreed with the opposition and rejected the application. D.T.C. appealed to the Board of Patents. The Board considered every detail of both designs thoroughly and found that the design of D.T.C. was sufficiently different from the design of Hang Zhou. D.T.C. was then able to proceed to the examination process. Although D.T.C. won against the opposition in the Board of Patents round, it is hard to refrain from the thought that the market dominance position of D.T.C. might have influenced the decision of the Board of Patents.[114]

### 4.1.5. Pharmaceutical oppositions

Another type of opposition is a patent opposition in the interest of societal wellbeing by a government sector or a non-governmental organization (NGO). Mostly, this type of opposition involves patents for medicine that affect public health and benefits broadly. So, if an opposition fails, social benefit will be undermined. For example, in Decision No. 17/2550, Besham Pharmaceutical (PTE) Ltd., a Singapore pharmaceutical company, applied for an invention patent for a medicine that used a new method to treat infection. The Government Pharmaceutical Organization (GPO) opposed the application based on the grounds that the applied formula for *Amoxicillin* and *Potassium Clavulanate* was already disclosed in European patents and that the mixture as layer tablet was common and showed no inventive step. Besham filed a counterstatement that the application differed from the European patents because its drug would slowly release *Potassium Clavulanate* in the first phase and release *Amoxicillin* combined with excipients in the second phase. The Director-General found that the drug in fact released active compounds in a different rate with those in the European patents and the drug also used a control agent in order to release both *Amoxicillin* and excipients, a procedure not mentioned in the European patents. Therefore, the Director-General decided that the invention of the drug was new and unlike those in the patents. GPO appealed on the grounds of public interest, stating that if the applicant were granted the patent, people would find it difficult to access to similar medicine, which would definitely affect the health of the public. Moreover, the European patents had already claimed the released rate of the compound. As such, the application should not be allowed. However, the Board of Patents upheld the decision of the Director because the Board agreed that the invention of the drug was new and unlike those in the European patents, as it had an inventive step developing from the European patents.

Similarly, in 1997, the GPO opposed a patent application for a therapeutic combination of Pfizer Product Inc., an American pharmaceutical company. The GPO reasoned that the combination was not new and common for medical practices. Pfizer made a counterstatement denying the opposition that its invention was new and had an inventive step as the USPTO had already granted it a Patent No. 6455574. The Director-General agreed with Pfizer and ordered to reject the opposition. GPO appealed to the Board of Patents claiming that GPO and domestic pharmaceutical companies would find it hard to manufacture the same drug for Thai patients that would make the patients buy the drug in an expensive price if the Patent Office granted a patent to Pfizer. Moreover, Pfizer's patent was removed some clauses by the USPTO which might refer to some flaws in the application. Nevertheless, the Board of Patents agreed that the invention of Pfizer was new and had an inventive step. Therefore, the Board upheld the decision of the Director.

Also, in Decision No. 12/2553[115], GPO made an opposition against a patent application of Bristol-Myers Squibb Company (BMS), a global biopharmaceutical company headquartered in New York. In 2003, BMS had applied for an invention patent for a method for treating HIV infection patients in Thailand, but the GPO opposed the application in 2006 on the grounds that the application was similar to an expired US patent and that the application was in conflict with Section 9(4) of the Patent Act.[116] The

[113] Decision of Thai Board of Patents No. 15/2554

[114] The Board strangely described the dissimilarity between the two designs in its decision, especially regarding a circle cylinder and a bit oval cylinder, which were only minor contrary details. Unfortunately, given that D.T.C. is such a large company, this decision may have been biased in favor of D.T.C.

[115] Decision of Thai Board of Patents No. 12/2553

[116] **Section 9** The following inventions are not protected under this Act:

Director-General rejected the opposition based on the reason that the invention in the application was not new but had an inventive step. GPO appealed but the Board of Patents upheld the decision of the Director-General reasoning that the application had an inventive step from the US expired patent and the claims of the application were not in conflict with the Patent Act.

Let us observe again that a result of these decisions, people in Thailand and other developing countries have to buy expensive drugs from foreign pharmaceutical companies although the majority of people cannot afford to buy those drugs. When pre-grant oppositions of pharmaceutical inventions fail, the unfair price is enacted in the citizens of developing countries falling sick and dying. Although the GPO can still appeal a decision of the Board of Patents to the Court, in the time between the petition and final ruling, the pressing needs of people who must maintain a drug regimen or otherwise have immediate access to medicine are not put on pause. In the past, the Thai Patent Act included provisions for pharmaceutical patents in Part VII but it was canceled entirely in 1999 due to Thailand's accession to the TRIPs Agreement. The Patent Act should resume its exception section for medicines for the sake of public interest. If Thai government could bring back those provisions relating to medicines, it would be greatly beneficial to the Thai people.

To sum up, an opposing party has a right to oppose a patent application in Thailand during a pre-grant opposition period but the opposition may not always succeed. The opposing party may have to appeal yet nothing guarantees that the appeal will be successful. The opposing party may use its last endeavor by bringing the dispute to the IP&IT Court but, also, nothing guarantees that the opposing party will also succeed in an opposition against the registration of a patent application. Finally, a situation may result in which an opposing party simply wastes time, effort and expense. Moreover, the 90-day period after the publication of an application may unfairly restrict the opportunity for anyone wishing to oppose an application.

## 4.2. Successful Oppositions

A successful opposition not only brings joy to an opposing party but can also strengthen business value and, in case of pharmaceutical patents, social justice. As claimed by Todd D. Clark in Pharma Handbook[117], "a pre-grant opposition is shaping up to be the biggest impediment to patent issuance".[118]Thus, when oppositions succeed during the pre-grant opposition period, they bolster the argument that Thailand has an efficient pre-grant opposition system, whose benefits are for the public at the end of the day.

As mentioned, the process of opposition begins after publication of a patent application. Once opposed, an applicant can always make a counterstatement. If the Director-General orders to reject an application, an applicant can always appeal the order to the Board of Patents within the provided period. If an appeal of an opposing party is upheld, an application will be rejected. This can be counted as a successful opposition. On the other hand, if the Director-General orders to reject an opposition, an opposing party can appeal the order to the Board of Patents as well. The Board of Patents may decide to reverse the Director-General's order. Consequently, an application will be rejected, which serves as a successful opposition as well. Either way, an opposition is successful. There have been many decisions like this.

### 4.2.1. Applications rejected by the Director-General and the Board of Patents

In 1997, in the Board of Patents' decision No. 13/2540[119], Mr. Kitti applied for a design patent for a tape cassette shelf but Mr. Chamras opposed the application, reasoning that the applied shelf was similar to his

---

(1) naturally occurring microorganisms and their components, animals, plants or extracts from animals or plants;
(2) scientific or mathematical rules or theories;
(3) computer programs;
(4) methods of diagnosis, treatment or cure of human and animal diseases;
(5) inventions contrary to public order, morality, health or welfare.

[117] T. D. Clark, Pharma Handbook: a Guide to International Pharmaceutical Industry, 5th edition, (Voice of Insights, New Orleans: 2007), p. 70

[118] N. Shikha, "Comparative study of pre-grant and post-grant Patent opposition in India", Social Science Research Network, Available at <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1503188> accessed 17 January 2013

[119] Decision of Thai Board of Patents No. 13/2540

patent. Accordingly, Mr. Chamras had already sold the patented shelves in a widespread manner long before the date of Mr. Kitti's application. The design application featured a circle base while the design of the opposing party had a triangle base. Both designs were slightly different in height. The Director-General decided that both designs were not sufficiently different and rejected the application. The applicant appealed the order of the Director-General to the Board of Patents, but the Board of Patents upheld the decision of the Director-General because the design in the application was similar to the design in the opposition to the degree that it was clear the applicant imitated the design in the opposition.

Like the case of tape cassette shelf in 1997, in Decision No. 1/2542, [120]an application for a refrigerator and compressor of refrigerant invention patent by Hitachi LTD was rejected by the Director-General and the Board of Patents respectively. However, this 1999 decision had two opposing parties: Sanyo Universal electric and Mrs. Samakkachan. The opposition by Sanyo Universal electric was rejected while the opposition by Mrs. Samakkachan was accepted. The reason for rejecting the application by the Director-General was that the applied invention was not new; as a matter of fact, it was a combination of existing inventions without adding new technology. As a result, the applied invention had no inventive step. Hitachi LTD appealed the decision of the Director to the Board of Patents but the Board also rejected the application on the same ground as the Director.

These two decisions show the triumph of opposition in both the publication of application process and the appeal process. Ideally, it would be instantly apparent when an application had copied prior art and would thereby be immediately rejected by the Director. In reality, many applications waste both the time and money of the patent office and the opposing party, who are compelled to file an opposition although the infringing application will surely be rejected at the end once it has been thoroughly examined two or more times.

### 4.2.2. Successful Appeals

In Decision No.3/2541,[121] dating from 1998, the opposition failed in the first stage but succeeded in the appeal stage. The decision involved a method of making a machinery joint for steel deformed bar in reinforced concrete. The applicant applied for a method of making a machinery joint that could stand the pulling and pressing of a steel deformed bar in a reinforced concrete while the opposing party opposed that the method was not new and had no inventive step. The Director-General considered evidence and ordered to reject the opposition because the applied machinery joint had a longer length for its ply than a normal joint, making it not obvious and possessing an inventive step. The opposing party appealed. The Board of Patents concluded that despite the inventive length of the joint's ply, the method was still common for people with such skill. As a result, the method had no inventive step and the application was rejected. This decision shows how understanding technical function can be a problem for examiners, the Director-General, and the Board of Patents. If only there were a set standard for determining technical function, the Director and the Board would decide in the same way which can help to shorten the time for all parties.

Decision No.1/2544[122]from 2001 reveals an opposition rejected by the Director-General because the opposing party did not submit enough supporting documentation. However, when the case reached the Board of Patents, the opposing party convinced the Board with additional evidence to make the opposition success in the appeal stage. The decision reflects that sufficient supporting documents are very essential in terms of whether an opposition fails or succeeds. In the decision, Kabushiki Kaisa Toshiba applied a patent for a refrigerator in 1990 but Universal Electric Public Co. Ltd. opposed that the invention was not new, as evidenced in its photo taken in 1989. Besides, the applied part was merely placement of an existing technology which did not add any difference to the preexisting function. Toshiba's counterstatement argued that the invention was new because the photos and details were only disclosed to a small group of experts, not to the public. The Director-General decided in favor of Toshiba reasoned that both inventions were slightly different since Toshiba had improved some functions that were useful than previous one in the photo of Universal. Moreover, Universal did not show any evidence supporting its claim that the invention in the photo had already been manufactured or disclosed to the public in its substantial parts domestically or internationally. Nevertheless, Universal appealed to the Board of Patents. The Board of Patents rejected Toshiba's application because Universal showed

[120] Decision of Thai Board of Patents No. 1/2542
[121] Decision of Thai Board of Patents No. 3/2541
[122] Decision of Thai Board of Patents No. 1/2544

evidence of manufacture and distribution of its similar refrigerator before Toshiba's application date. Universal even offered the Board to bring a refrigerator and its parts to the patent office to show the likeness. Therefore, the Board concluded that the invention of Toshiba was not new. Similarly, in Decision No.10/2554[123], the applicant had applied for a design patent for boots but the opposing party opposed it on the ground that it was not novel but was similar to its exported boots according to its catalogue. The Director-General rejected the opposition. Subsequently, the opposing party appealed the decision to the Board of Patents but the Board, after considering all evidence, decided that the boots in the application and the opposition and appeal were closely similar. The differences were not substantial enough to make the boots in the application new. Therefore, the Board rejected the application.

These oppositions failed at first and succeeded at the end[124]. Besides looking at the results of an opposition, the reasons for failed or successful oppositions are also worth consideration. These reasons are varied and subjective depending on the Director's and the Board's discretion and documentation provided at each stage. Patent quality deriving from an opposition process also depends on discretion and supporting evidence as well.

### 4.2.3. Group oppositions

Sometimes an application is opposed by a number of opposing parties, similar to a class action in a court. The result of "group oppositions" tends to be rejection of the application because they demonstrate many people knew about the invention before patent registration. As such, the invention must not be novel. Registration of such invention would harm other inventors and interfere in their channel of trade.

For example, in Decision No. 6/2544[125]covering a patent for a plastic bag, the application was opposed by five plastic bag factories since the technique for manufacturing a three-layer plastic bag were common and could be easily known by veterans in such area. The Director-General rejected five oppositions, and the application met its final rejection by the Board of Patents at the appeal. Echoing the former, Decision No. 29/2549[126]rejected a patent application after being opposed by three oppositions. The application's subject matter was an improvement of the mechanical quality of a polyethylene pipe but three oppositions all claimed that such pipes were already widely produced according to EU and Japanese patents, which were referred to in the decision. Both Director-General and the Board of Patents agreed to reject the application because the pipe was not new and had no inventive step.

### 4.2.4. Serial Oppositions

The next group of oppositions is a series of oppositions by a person or company. Just like previous section, this type of opposition is normally between the same applicant and opposing party or *vice versa* such as an applicant becomes an opposing party or an opposing party turns to be an applicant in a latter decision. Generally, these people do the same business and produce same invention/design. Obviously, they are competitors. As a consequence, the grant of patent to other parties will lessen the business opportunities of another party since a patent is an exclusive right. Any method and documents that can oppose the registration of a patent application will be used. For example, in Decision No. 18/2549[127], Mrs. Lerkvi-chiean opposed the registration of design patent application for a shoe by Bowling Shoe Co. Ltd., claiming that the company's design application imitated a design of a shoe in an Italian shoe magazine published in 2001, although the application was made in 2002. Despite an argument that a design application was different from a shoe in the magazine, the Director-General and the Board of Patents decided to reject the application because the application and the shoe in the magazine was obviously a copy. Similarly, in Decision No., 19/2549[128], Bowling Shoe Co. Ltd. also applied for a design patent for a shoe but Mrs. Lerkvi-chiean opposed the application again, claiming that the application was similar to a shoe in an Italian shoe magazine published one year prior to the application date. The differences between the application and the shoe in the magazine were minor. Although the applicant presented numerous reasons why the designs differed, the Director-General and the Board of Patents did

[123] Decision of Thai Board of Patents No. 10/2554
[124] As far as the author can ascertain, no lawsuits challenging the decisions have been filed
[125] Decision of Thai Board of Patents No. 6/2554
[126] Decision of Thai Board of Patents No. 29/2549
[127] Decision of Thai Board of Patents No. 18/2549
[128] Decision of Thai Board of Patents No. 19/2549

not agree with the applicant. The application was obviously seen as an imitation of a shoe in the magazine. As a result, the application was rejected.

In our analysis, there must be a connection between Bowling Shoe Co. Ltd. and Mrs. Lerkvi-chiean in making consecutive oppositions. Through research on the Internet, the author has found that Mrs. Lerkvi-chiean is in the shoe business, most recently in the capacity of director of Regent Street Co. Ltd., which manufactures rubber shoes.[129] Therefore, we can conclude that both Bowling Shoe and Mrs. Lerkvi-chiean are competitors and the registration of the shoe designed by the former can obstruct the business of the latter. Their serial oppositions are normal and understandable.

As covered in our discussion of failed oppositions, D.T.C. Industries PLC made a series of unsuccessful oppositions. Anyway, D.T.C. had some luck that it could succeed in these oppositions. In Decision No. 15/2553[130], D.T.C. opposed an industrial design invention of Mr. Suputipong involving a design for a ballpoint pen. D.T.C reasoned in the opposition that the design in the application was not new because it resembled disclosed designs to the degree it was apparent the application imitated the disclosed designs. The applicant countered that his application differed from the claimed design in both the handle and design of a pen. The Director-General rejected the opposition. However, D.T.C. appealed to the Board of Patents, insisting on the same claim but also pointing out to similar parts between the application and the disclosed designs. The Board considered all evidence and documents and finally agreed with D.T.C. that each part of the design in the application was similar to the disclosed designs. The application merely brought the design for a handle of a pen from one disclosed design and a design for a printed pattern of a pen from another to compose as a new design. Therefore, neither novelty nor an inventive step was found in the application. The Board of Patents reversed the decision of the Director-General and decided to reject the application. Similarly, in decision No. 16/2553, Mr. Suputipong applied for an industrial design patent for a ballpoint pen. Again, D.T.C. opposed the application with the ground that the design was not new because such design was similar to Spanish patent No. 143629. The applicant countered that he had developed all designs by himself up to the point he decided to apply for a patent. With such a weighty counterstatement including his original design drawing, the Director-General decided to reject the opposition. As informer decisions, D.T.C. appealed by stressing the same reasons in the opposition but adding that the applicant developed nothing more than a copy of the existing designs of the handle, body and stopper of the pen in another design patent. The Board considered the appeal and agreed with D.T.C. that each part of a design in the application came from existing designs. As a result, the Board of Patents rejected the application. Once more, Mr. Suputipong applied for an industrial design patent for a ballpoint pen, but D.T.C. opposed the application on the ground that the application was similar to its design patents. The applicant's counterstatement claimed he was the one who had researched and developed the design in the application. The Director-General was convinced by the applicant and rejected the opposition. D.T.C. appealed the decision to the Board of Patents, claiming that the design in the application was not new. The Board agreed with D.T.C. and rejected the application.

From these three decisions involving the design of a ballpoint pen, it is not hard to guess that both the applicant and the opposing party are competitors, as our research proves. Mr. Suputipong is Managing Director of Nanmee Co. Ltd., a large stationary company in Thailand offering the brands *Horse, Arrow, Nanmee* and *Max*, while D.T.C. Industry PLC is also a dominant stationary company in Thailand offering several brands including *Lancer*. Securing a patent is another strategy to exclude competitors from the market since a patentee has an exclusive right. Consequently, competitors must raise every reason to oppose a patent application. The success or failure of an opposition depends on whether the reasons and supporting evidence are solid enough. The only suspicion left is why the Director-General and the Board of Patents decided the same dispute dissimilarly? Was it because of the individuals' discretion or due to the Director or the Board's connection to one of the companies? These questions are intriguing to know.

Nonetheless, in 2009, four consecutive Board of Patents decisions featured the same applicant and an opposing-party were same persons for four Board of Patents' decisions consecutively. All decisions were about the process of making pulp from tapioca waste or mixed tapioca waste. In a decision No. 1/2552[131], Mr. Techaviboon applied for an invention patent for a process of making pulp from tapioca waste but the Cementhai Legal Counsel Limited (Cementhai) opposed the application reasoning that the process of making pulp from tapioca waste was simple and easy. The invention had no novelty and inventive step.

[129] Regent Street Co. Ltd., Available at <http://plastic.oie.go.th/CompanyInfo.aspx?cid=584> accessed 6 March 2013
[130] Decision of Thai Board of Patents No. 15/2553
[131] Decision of Thai Board of Patents No. 1/2552

The Director-General rejected the application. Mr. Techaviboon appealed but the Board of Patents still agreed with reasons of the opposition. Although the use of pure tapioca waste increased the quality of pulp in paper by 10-20 percent, the process of making such pulp was too simple for people in paper industry. The Board of Patents upheld the decision of the Director-General, which was to reject the application. Similarly, in a decision No. 2/2552[132], Cementhai opposed a patent application of Mr. Techaviboon again. The patent application involved a method of making pulp by adding pulp of tapioca waste to paper tissue during the process of manufacturing paper. The process of this invention was pretty similar to the application in a previous decision, but the latter invention was a slightly more complicated in adding pulp from tapioca waste to paper tissue during the pulping process. The Director rejected the application. In the appeal, Mr. Techaviboon tried to convince the Board of the complexity of the pulping process; nonetheless, the Board of Patents still rejected the application due to obviousness and lack of inventive step.

Again, in a decision No. 3/2552,[133] Mr. Techaviboon applied for a patent for mixed ingredients with tapioca waste to use in pulping process. Cementhai Legal Counsel Limited opposed the application of Mr. Techaviboon for the third time. Once more, the Director rejected the application because of obviousness and no inventive step. Although Mr. Techaviboon appealed by claiming that other ingredients like pieces of paper and wood bits could improve quality of paper by ten to twenty percent, the Board still rejected the application by upholding the reasons of the Director. Even worse, there was no evidence of improvement as claimed by Mr. Techaviboon and no exact percentage of the ingredients was disclosed in the application either. Anyway, as Mr. Techaviboon had also applied for a patent for ingredients of tapioca waste to use in pulping process. Cementhai opposed that the application was common and was already disclosed in a book published before the application date. Repeatedly, a decision No. 4/2552[134] showed that the Director-General rejected the application because of obviousness and no inventive step. The applicant appealed. The Board upheld the Director's decision despite the ingredients being cheaper than normal materials for pulping process and less harmful to people's health than other materials such as hay. The Board of Patents reasoned that the pulping process and the ingredients were too obvious for people in that field. Therefore, the application was not new and had no inventive step.

All four decisions have the same applicant and opposing party for a closely similar invention involving with making pulp from tapioca waste. Cementhai is a legal company of Siam Cement Group Plc., which is a giant company that also, manufactures paper. If the applicant was granted a patent, SCG would be in trouble for manufacturing paper using simple methods because the methods in these applications were too obvious. As a consequence, the examples of Cementhai as an opposing party can confirm that an opposition process can help improving patent quality.

### 4.2.5. Pharmaceutical opposition

The most important category of opposition involves medicine. Such oppositions have wide effects on pharmaceutical companies, inventors, NGOs, patients and patients' families because patented medicines are normally sold at prices too high for the majority of patients in Thailand, who are still poor. Developing countries typically do not have the resources to permit them to develop or invent medicines in a manner competitive with developed nations. According to human rights doctrine, it is unfair for citizens of these countries to pay expensive prices for patented drugs manufactured by companies based in developed countries. There are many examples of international pharmaceutical companies applying for patents for drugs that they intend to sell in Thailand at a high price; however, in many case, the companies' applications have been opposed by individual patients, governmental organizations or NGO. For patients in Thailand, successful oppositions have secured justice, social benefits, and the essential right to have good treatment and prolong life.

Our first example of an important pharmaceutical opposition involves a Thai mixed herbal medicine for AIDS patients. In 2004, decision No. 10/2547[135] revealed that herbs used commonly could not be registered for a patent if the mixed formula for the medicine was not distinguished and inventive enough

[132] Decision of Thai Board of Patents No. 2/2552
[133] Decision of Thai Board of Patents No. 3/2552
[134] Decision of Thai Board of Patents No. 4/2552
[135] Decision of Thai Board of Patents No. 10/2547

for an experienced person in that field. The applicant was Chulalongkorn University and the opposing party was Mr. Manoonwong. The University applied a patent for mixed herb formula for treatment of HIV/AIDS patients, but the application was opposed because the formula was published in several journals and patent applications and it was common knowledge to experienced Thai traditional doctors. The Director-General rejected the application because the formula had no inventive step or new healing result from mixing those herbs. The University appealed, yet the Board of Patents upheld the Director-General's decision for the same reasons. This decision has proved beneficial to HIV/AIDS patients since said patients can still find inexpensive medicinal herbs in a market unrestricted by any pharmaceutical company. Both the Director and the Board have done a good job protecting the social interest.

Interestingly, the decisions below may in fact be a series of opposition relating to pharmaceutical patents for herb extracts. Decision No. 23/2549[136] and Decision No. 16/2550[137] showed that Mr. Vichai's patent applications for Thai herbs were opposed by Muntana Panich Chiangmai Co. Ltd. and Smith Natural Co. Ltd. as the first and second opposing parties respectively. Decision No. 23/2549 covered a patent application for an abstract of *Pucraria minifica* and *Butea superba* in capsules, while Decision No. 16/2550 was covered an abstract of *Butea superba* solely.

In the first decision, after the application was opposed by the first and second opposing party, the Director-General rejected the second opposition because its arguments lacked clarity. However, the Director-General also rejected the application according to grounds in the first opposition since the applicant could not demonstrate that the invention had an inventive step. Both the applicant and the first opposing party appealed against the order of the Director. The applicant claimed his invention had an inventive step and the first opposing party argued that the invention not only had no inventive step but also had no novelty since the method of abstracting the herb was already published in medical textbooks. The Board finally decided to uphold the decision of the Director to reject the application of Mr. Vichai.

In the latter decision, the applicant applied for an invention patent for products abstracted from *Butea superba*. The first opposing party claimed that to add calcium to the products did not show any inventive step and the application was too similar to an existing patent. The second opposing party also supported the opposition of the first opposing party. The Director-General considered all evidence and decided to reject the opposition based on the reasons that the application was new and had an inventive step. The first opposing party appealed, arguing that the applicant did not state clearly in the application how much calcium was added to the products, nor why. The Board of Patents ruled that the application did not comply with Section 17(3) and (4) of the Patent Act[138] because the applicant did not describe the precise percentage of calcium in the products.

By rejecting both applications of Mr. Vichai regarding *Pueraria minifica* or *Butea superba* extracts, the Board of Patents preserved these herbs for the use of millions of patients who need them and cannot afford the premium price for a patented product. As a result, the public can utilize value from the herbs' extracts freely. Blocking common herbal treatments from being unfairly patented is a true public benefit oppositions can achieve. Therefore, for the sake of the public wellness, pre-grant oppositions should be maintained.

The next group is a series of oppositions by the Government Pharmaceutical Organization (GPO) against foreign pharmaceutical companies. The first decision was in 2010 against InterMune Inc., a leading global biopharmaceutical company headquartered in Brisbane, California. In decision No.

---

[136] Decision of Thai Board of Patents No. 23/2549

[137] Decision of Thai Board of Patents No. 16/2550

[138] Section 17

The application for the patent shall comply with the rules and procedures as prescribe in the Ministerial Regulations. The application for a patent shall contain:

(1) the title of the invention;

(2) brief statement of its nature and purposes;

(3) a detailed description of the invention in such full, concise and clear and exact terms as to enable any person ordinarily skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention and setting forth the best mode contemplated by the inventor to carry out his invention;

(4) one or more clear and concise claims;

(5) other items prescribed in the Ministerial Regulations

In cases where Thailand acceded to an international agreement or cooperation on patents, the patent application which is in compliance with the requirements of such international agreement or cooperation shall be deemed to be a patent application under this Act.

1/2553[139], InterMune Inc. applied for an invention patent in Thailand for chronic hepatitis C treatment methods for patients who had previously failed antiviral therapy. The GPO opposed the application because the method of treatment was in conflict with Section 9(4) of the Patent Act. The Director-General rejected the opposition but the Board of Patents rejected the application. The Board of Patents reasoned that the application conflicted with Section 9(4), which prohibits patents for methods of treating disease. The law was truly written for the public benefit.

Additionally, in Decision No. 1/2554[140], Novartis International AG, a Swiss pharmaceutical company, had applied for an invention patent in Thailand for an integration of an organic compound, but the GPO opposed the application, claiming that the invention was not new since it had already been disclosed in the US Patent No. 5952356 four years before the application was made. Although Novartis in its counterstatement argued that the invention had an inventive step and was not similar to the US patent, the Director-General still rejected the application. Novartis appealed by claiming that the invention was not like any invention produced before because its integration caused an unexpected result with *HMG-Co A reductase* inhibitors, which was very beneficial in combating high blood pressure. Fortunately, the Board of Patents did not agree with Novartis, but instead reasoned that the invention was not new as disclosed in the US patent and patent application. Moreover, it ruled the unexpected result as claimed by Novartis did not exist. No improved result was found. Therefore, the Board rejected the appeal of Novartis.

Although these were serial oppositions by the GPO, they were still successful and benefitted for the Thai public by protecting its access to inexpensive medicines, thereby serving as model oppositions for other developing countries. Above all, related governmental organizations must work forcefully and efficiently to protect the social interest; whether oppositions succeed or fail depends on the opposing party be able to search for prior art and draft an effective and complete opposition.

To sum up, the process of opposition is necessary in any patent registration system. Not only can it reveal poor patent quality, but it also can protect social benefits. Developing countries must have a patent opposition system; in particular, Thailand's pre-grant opposition successes show that the pre-grant opposition system seems to be best suited for developing and underdeveloped.

## 4.3. Court cases resulting from opposition

There have been several appeals brought to the Central Intellectual Property and International Trade Court (CIPITC) and to the Intellectual Property and International Trade division of the Supreme Court (IP&IT Court) challenging the Board of Patent's decision to reject or grant a patent. The most recognized patent opposition case brought to the Court in Thailand involved a suit in 1999 against the Department of Intellectual Property (DIP) regarding its grant of a patent to Bristol-Myers Squibb (BMS) for the antiretroviral drug Didanosine (DDI). It may have been that the opposing parties did not manage to file a pre-grant opposition within 90 days from the publication of the application date and thus had to file a lawsuit after the grant of patent or that the opposing parties did not know about the application until the grant of patent.

The AIDS Access Foundation, a Thai AIDS foundation, and two AIDS patients were plaintiffs while Bristol-Myers Squibb (BMS) and the Department of Intellectual Property were the defendant and co-defendant respectively. The story began when BMS had applied for a patent for DDI in the U.S. and in Thailand. However, since DDI was not new at the applied date, BMS added an antacid to include inventive step in order to be able to apply for a patent. While DDI was in the process of consideration for a patent in the U.S., BMS was granted a patent for DDI in Thailand without limitation under the formulation range of 5mg to 100mg per dosage unit despite BMS having indicated in its application that BMS applied for just 5mg to 100mg per dosage unit. As a result, it was forbidden for any dosage of DDI to be manufactured in Thailand except with the consent of the patent holder BMS. Moreover, the GPO, the main health support organization in Thailand, was prohibited from producing DDI to sell at an inexpensive price to the Thai people. Consequently, the poor could not access DDI, leading to a number of AIDS fatalities in Thailand.[141]

[139] Decision of Thai Board of Patents No. 1/2553
[140] Decision of Thai Board of Patents No. 1/2554
[141] Revoking An Invalid Patent: The Case of Didanosine in Thailand, Patent Opposition Database, Available at < http://patentoppositions.org/case_studies/500e9b8c7718ea0002000018> accessed 4 April 2013

The Court found later ordered DIP to annul the limitation of specified dosage range in BMS's patent application. Although the cancellation of the limitation could be done upon discretion of the Director-General, granting such a patent was unethical since it endangered the lives of Thai AIDS patients and forced them to pay a high price for DDI, a generic drug. The Court, therefore, ordered BMS and DIP to amend the patent by putting back the limitation of dosage 5mg to 100mg. The GPO was then able to produce cheaper DDI at dosages above 100 mg for HIV/AIDS patients. The Court has proven to be a true supporter of the people of Thailand who suffer from unfairness especially in the case of essential requisites like medicine.

The next case also involves medicine, specifically Thai traditional medicine. Again, this case was not an appeal of the Board of Patents' decision since the Patent Office had already granted a patent to the defendant. In the Supreme Court's decision No. 4783/2549[142], Khaolaor Pharmacy Partnership Ltd. (Khaolaor) and others were plaintiffs and Muntana Panich Chiangmai Co. Ltd. (Muntana) and others were defendants. In the case, both plaintiffs and defendants manufactured and sold modern medicine, traditional medicine, Chinese medicine, cosmetics, and supplementary food that had *Pueraria mirifica* as an ingredient. On August, 1999, Muntana announced on a daily newspaper (in Thai) that

Muntana Panich Chiangmai Co. Ltd is the patentee of a Thai patent No. 8912 for products that have *Pueraria mirifica* as an ingredient. If anyone is manufacturing, selling, having for sale, or offering for sale products that have *Pueraria mirifica* as an ingredient, that person shall cease and desist such act and recall all products that violate the patent from the market immediately."

The plaintiffs examined the publication of the defendants' patent application and found that the invention of the defendants was not new because it was already disclosed since 1931. With those claims, the plaintiffs sued DIP for granting of the invalid patent and sued the defendants for infringing the plaintiffs' rights and causing damages to the plaintiffs. The plaintiffs requested the Court to revoke the patent No. 8912. The defendants' essential testimony was that (1) the plaintiffs had no right to file a lawsuit, (2) the lawsuit was illegal, and (3) the invention was new and had never been disclosed anywhere before the application date. Nonetheless, the Court revoked the patent because the patent was invalid. Afterwards, the defendants appealed the Court's decision to the Supreme Court. The Supreme Court opined that the invention was not new and had no inventive step since the use of *Pueraria mirifica* in products had been common in Thailand for a long time. Besides, the plaintiffs had lawful right to file a lawsuit against the defendants because they were in the same business. Therefore, the Supreme Court decided to uphold the decision of the Court.[143]

In the decisions of the Court and the Supreme Court above, the judges focused more on the factors of the patentable subject. Once the judges compare the disclosed document with the patent application, the similarities between these documents made the Supreme Court judges decide that the patent was not novel, leading to a revocation of the patent. Moreover, the use of *Pueraria mirifica* in products is quite common in Thailand since it is a traditional herb whose pharmaceutical qualities are widely known, a fact which the judges were likely aware. In any case, the supporting evidence made the uncomplicated for the judges. Decisions like these prevent unfair competition from would-be patentees as it blocks them from dominating *Pueraria mirifica* market. As such, patent opposition, even in the Court, still can control patent quality and serve to balance competition as well.

Lastly, the Supreme Court Decision No. 8993/2547[144]covering an invention patent for a condenser and refrigerant compressor is worthy of consideration. In this appeal case resulting from a decision of the Board of Patents to reject the patent, the Supreme Court decided to uphold the decision of the Court to cancel the decisions of the Board of Patents and the Director-General, who were defendants. The story began when Hitachi Ltd. had applied for an invention patent for condenser and refrigerant compressor but found itself facing two oppositions. The Director-General decided to reject the application because the invention was not new and had no inventive step. The Board of Patents also upheld the decision of the Director-General. However, Hitachi subsequently appealed the decision of the Board of Patents to the Court. The Court ruled on 16 October 2000 that Hitachi's Patent Application No. 014866 was a new invention that also had an inventive step. Therefore, the Court canceled the decision of the Board of Patents and ordered the Director-General to permit the patent application to the next stage. The defendants in the Court appealed the judgment to the Supreme Court, claiming that the invention in the

[142]The Supreme Court of Thailand decision No. 4783/2549

[143]Decision No. 4783/2549 of the Supreme Court of Thailand

[144]The Supreme Court of Thailand Decision No. 8993/2547, which must follow from Thai Board of Patents Decision No. 1/2542, as already discussed in 4.2.

application was not new and had no inventive step. As mentioned, the Supreme Court agreed otherwise and ordered to cancel the decision of the Board of Patents and proceed the patent application to the next stage.

From the judgment we see that oppositions do not only serve to prohibit patent registration, but also act as a procedure which promotes fairness for both the applicant and the opposing party, as Hitachi. One of the parties may lose during opposition procedure, but because of the appeal procedure to the Court and the Supreme Court, such party can restore his lawful right.

In the author's opinion, the pre-grant opposition system and the appeal procedure to the Central Intellectual Property and International Trade Court and to the Supreme Court, division of Intellectual Property and International Trade suit the patent registration system in Thailand perfectly. Nonetheless, while the system is good, it would benefit from the hire of more officers and judges expert in a variety of subject matter. The discretion of patent examiners, patent committees, the Director-General, and the Board of Patents are tremendously essential to the fairness of the patent registration system. Furthermore, quality patent agents and lawyers are also in need as half of patent lawsuits are dismissed in the Central Intellectual Property and International Trade Court due to a lack of intellectual property knowledge and inexperience on the part of the agents and lawyers.[145]

## 5. Effectiveness of the opposition procedure in Thailand

In most developing countries, trade channels are narrow regardless of the type of product. This is because business operators in such countries are comparatively few in proportion to the population. For any business in Thailand, the market is small and competition scarce. At most, there are merely five or six businesses offering the same products in the same market. Since competition is not as great as in larger and more developed countries, the chance for a monopoly or business cartel are great. Dominant companies in the market can also abuse their power in order to grant a patent grant. Thus, it is essential for a patent office to have strong quality control before granting any patent. Yet, the number of examiners in a patent office may be insufficient to examine the validity of the components of an invention. Pre-grant opposition can help with this issue in obstructing invalid patents through the help of other persons apart from examiners in a patent office.

From the examples above, an opposition in Thailand may or may not succeed depending on discretion of the Director-General, the Board of Patents, the Central Intellectual Property and International Trade Court, and also on the capability of the opposition to present a convincing argument. Analyses of how pre-grant opposition in Thailand controls patent quality efficiently is subjective yet must depend on the factual basis of each case. As analyzed in Part 4, pre-grant oppositions by interested persons have stopped the grant of a bad quality patents in many instances. These pre-grant oppositions can win relatively effortlessly if an application is clearly invalid and an opposing party can prove that. Part 4 proves that Thai patent officers are efficient enough to consider each opposition and its appeal justly. For example, the GPO has succeeded many times via pre-grant opposition to defend the public interest in generic drugs from companies that have sought for patent for them. Moreover, Thailand has an excellent specialized court system in intellectual property law. The system does not have a procedure in the Court of Appeal which enables a plaintiff to appeal directly to the Supreme Court from the Central Intellectual Property and International Trade Court.

However, oppositions in Thailand are not always successful. The main reasons for failed pre-grant opposition in Thailand as analyzed in Part 4 are (1) poorly prepared documents and insufficient evidence and claims, (2) inexperienced patent agents or lawyers, (3) unpredictable discretion of officers, (4) evidence of foreign registered patents, and (5) influence of large companies. There are also random reasons for failed patent oppositions such as an obscured employment contract[146], inability of the Director-General and the Board of Patents to count the 90-day period from a publication date correctly[147] and negligence of examiners to remove a dosage claim from essential medicines.

---

[145] K. Suppawatanakul, "10 years passed of the DDI pharmaceutical patent case and Thai patent registration system still has problem (in Thai)", Thailand Information Center for Civil Rights and Investigative Journalism (TCIJ), Available at <http://www.tcijthai.com/TCIJ/view.php?ids=1316> accessed 29 March 2013

[146] Decision of Thai Board of Patents No. 2/2541

[147] Decision of Thai Board of Patents No. 21/2549

Regarding the current efficiency of pre-grant opposition in Thailand, the 90 days period is an adequate minimum of time to make an opposition. This is because if the period were longer, it would prolong the grant of patent, adversely affecting applicants' rights. If a patent is truly invalid, any person can challenge the invalidity and revoke such patent with the patent office or the Court. The author is satisfied with pre-grant opposition in Thailand as of now. Yet there is room for improvement in performance. Firstly, the author suggests related authorities to set up a standard for similarity between prior arts and an invention in an application. Clearly establishing a set of rules and regulations for determining technical, chemical, and biological functions are also necessary for examiners to decide the validity of an invention according to the same standards. Patent applications should be published in famous daily newspapers to access a wide enough audience to get the attention of any potential opponents of an application because the opposition must be done strictly within 90 days after the publication. Finally, the author suggests the Department of Intellectual Property recruit more experienced examiners in order to check prior arts and scrutinize the validity of patent applications more efficiently. Enacting these suggestions will improve the quality of pre-grant opposition in Thailand, which will lead to an improvement of patent quality as well.

It must be stressed here that the patent registration procedure must have an opposition process to control patent quality. The lack of an opposition procedure can lead to a tremendous number of revocations and lawsuits to a patent office and the Court. Moreover, it will lead to a quick process of granting a patent; yet many patents will be granted carelessly and will prove to have bad quality in the end. It is wrong for anyone to be granted a patent when the patent is in fact invalid. In addition, a pre-grant opposition can help terminate an application before a grant of a patent if an obvious invention is applied for a patent. Likewise, it is extremely essential to improve the quality of examiners and officers in the patent office from time to time as well as recruit more specialists to examine each application. Pre-grant opposition by interested persons or prosecutors is necessary, especially in developing countries where a balance between the rights of inventors and public benefit must be well maintained. Therefore, in Thailand, the pre-grant opposition procedure can be counted as a strong mechanism to scrutinize a patent application by any interested person before an examination procedure by examiners.

## 6. Tendency of patent opposition system in Thailand

When an applicant applies for a patent, any interested person can oppose the patent application within 90 days after a publication of the patent application. Thereafter, an applicant may make a counterstatement against the opposition. After that, the Director-General will make a decision either to reject the opposition or reject the application. Any party that does not agree with the decision of the Director-General has a right to appeal the decision to the Board of Patents. These opposition processes are handled within the Patent Office. Therefore, in each decision of Thai Board of Patents, there are two parts: (1) decisions of the Director-General, and (2) decisions of the Board of Patents.

From information kindly given by the legal office of the Department of Intellectual Property, the author has composed a table of decisions for petty patents, decisions with oppositions from interested persons, and decisions in which the Director-General ordered to reject patent applications without oppositions from interested persons. The Board of Patents decisions that the author includes cover the period from 1995 to 2011. In total, there are 255 decisions but with just 80 decisions that have oppositions from interested persons. Each year, decisions of the Board of Patents with oppositions from interested persons can be divided as the table below.

---

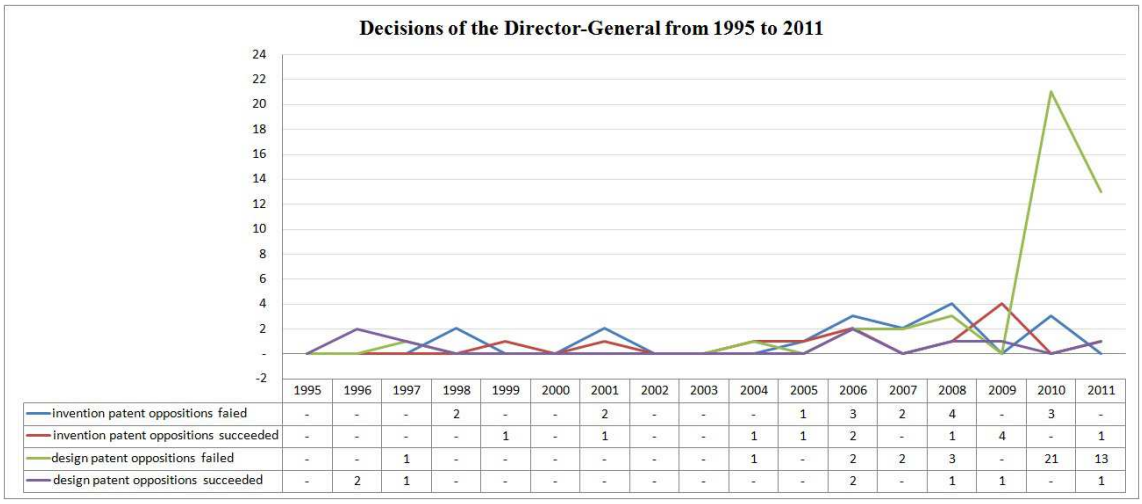
The applicant applied a patent for a pile rig. The application was opposed based on a reason that the opposing party's patent was infringed. However, the opposition was rejected by the Director-General because the opposing party did not oppose within 90 days from the date of publication of the application. The opposing party appealed and the Board found that the opposition was filed within 90 days of the publication date but the application did not infringe the patent of the opposing party because the rig in the application was not similar to the patented rig.

**Table of Decisions of the Board of Patents with Oppositions from Interested Parties, 1995 to 2011**

| Year | Number of Failed Oppositions | | | | Number of Successful Oppositions | | | | Total Opposition Decisions | Total Decisions per year |
|---|---|---|---|---|---|---|---|---|---|---|
| | Invention Patents | | Design Patents | | Invention Patents | | Design Patents | | | |
| | Director-General order | Board of Patents' decision | Director-General order | Board of Patents' decision | Director-General order | Board of Patents' decision | Director-General order | Board of Patents' decision | | |
| 1995 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 1996 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 2 | 14 |
| 1997 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 2 | 19 |
| 1998 | 2 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 4 |
| 1999 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 |
| 2000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 2001 | 2 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 3 | 7 |
| 2002 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| 2003 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 2004 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 2 | 12 |
| 2005 | 1 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 13 |
| 2006 | 3 | 3 | 2 | 1 | 2 | 2 | 2 | 3 | 9 | 29 |
| 2007 | 2 | 1 | 2 | 2 | 0 | 1 | 0 | 0 | 4 | 19 |
| 2008 | 4 | 5 | 3 | 2 | 1 | 0 | 1 | 2 | 9 | 18 |
| 2009 | 0 | 0 | 0 | 0 | 4 | 4 | 1 | 1 | 5 | 8 |
| 2010 | 3 | 2 | 21 | 5 | 0 | 1 | 0 | 16 | 24 | 69 |
| 2011 | 0 | 0 | 13 | 7 | 1 | 1 | 1 | 7 | 15 | 27 |

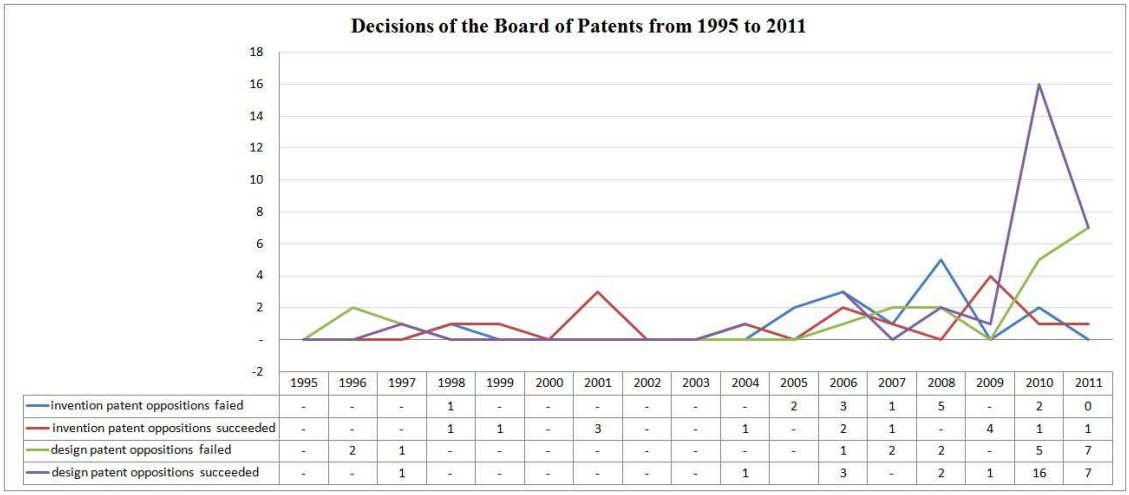
From the table above, the number of decisions with oppositions is much lower than the total number of decisions that the Board of Patent has decided per year. For example, in 1996 and 1997, decisions with oppositions represented only two decisions out of fourteen and nineteen decisions respectively. Furthermore, there was no decision with oppositions by interested persons at all from 2002 through 2003. One could argue that it was a period that Thailand had just recovery from the economic crisis. The situation resulted as no patent oppositions filed, nor any design patents granted because business entrepreneurs focused only on maintaining their business after the collapsing economy. The number of decisions with oppositions by interested persons has risen again from 2004 onwards. Especially in 2010, the total number of decisions with oppositions reached twenty-four, with design patent applications representing those most opposed.

On the other hand, in separating the table according to decisions of the Director-General and the Board of Patents, the research finds that most patent oppositions failed in the Director-General round as compared to appeals in the Board of Patents round. This information indicates that a typical opposing party may not yet be ready with supporting documentation and convincing evidence when the Director-General makes a decision, but they prepare better for the decision of the Board of Patents. As a result, the number of successful oppositions in the Board of Patents round is higher than the number of successful oppositions in the Director-General round. In the same way, the numbers of failed oppositions in the Director-General round are more than numbers of failed oppositions in the Board of Patents round. From the record, the author generates a graph for decisions in the Director-General round and a graph for decisions in the Board of Patent round from year 1995 to year 2011 per the below.




| | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| invention patent oppositions faied | - | - | - | 2 | - | - | 2 | - | - | - | 1 | 3 | 2 | 4 | - | 3 | - |
| invention patent oppositions succeeded | - | - | - | - | 1 | - | 1 | - | - | 1 | 1 | 2 | - | 1 | 4 | - | 1 |
| design patent oppositions failed | - | - | 1 | - | - | - | - | - | - | 1 | - | 2 | 2 | 3 | - | 21 | 13 |
| design patent oppositions succeeded | - | 2 | 1 | - | - | - | - | - | - | - | - | 2 | - | 1 | 1 | - | 1 |

The graph above shows that successful design patent oppositions are trending upwards, although the numbers of successful oppositions lessened a bit in 2011. The dip may be due a decrease in the total number of patent oppositions presented before the Board. Failed design patent oppositions are also on the rise as well, but their average is lower than for successful design patent oppositions. Nevertheless, both failed and successful invention patent oppositions have fallen continuously since 2006. Therefore, the tendency is that the number of invention patent oppositions will continue to be lower than the number of design patent oppositions in the Director-General round. Also, it seems that failed invention and design patent oppositions will continue to increase in the Director-General round. The Director-General tends to reject oppositions rather than patent applications.




| | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| invention patent oppositions faied | - | - | - | 1 | - | - | - | - | - | - | 2 | 3 | 1 | 5 | - | 2 | 0 |
| invention patent oppositions succeeded | - | - | - | 1 | 1 | - | 3 | - | - | 1 | - | 2 | 1 | - | 4 | 1 | 1 |
| design patent oppositions failed | - | 2 | 1 | - | - | - | - | - | - | - | - | 1 | 2 | 2 | - | 5 | 7 |
| design patent oppositions succeeded | - | - | 1 | - | - | - | - | - | - | 1 | | 3 | - | 2 | 1 | 16 | 7 |

Additionally, the graph above shows that from 2005 onwards, successful design patent oppositions have increased tremendously compared to failed design patent oppositions. This trend should continue for a couple of years due to the promotion of a design patent by the Thai Research Fund and DIP. In the same way, the number of successful invention patent oppositions has fallen since 2006, but the numbers of successful invention patent oppositions are still higher than the number of failed invention patent oppositions in the Board of Patents round. It seems that the Board of Patents will continue to decide in favor of patent oppositions and reject patent applications, regardless whether they are invention or design patents.

## 7. Concluding remarks

As R. Polk Wagner has stated, "There is perhaps no patent issue with a higher profile than the question of patent quality."[148] Poor patent quality can have many negative consequences, as we explore above. Improving patent quality via the opposition system is a method with proven successes. However, the results depend on many factors, such as the patent registration system and its enforcement in each country and economic circumstance. Also, the question as to whether pre-grant or post-grant opposition is better is difficult to answer. Different countries may have different results even if they adopt the same type of opposition. As such, pre-grant patent opposition in Thailand is studied as an example. Thorough research found that pre-grant opposition system in Thailand has proven worthy of its enactment because the system prevents many low quality patents as well as defends public interest via different means, especially in the case of pharmaceutical patents. The research indicates that pre-grant patent opposition, with or without post-grant opposition, is well-suited for Southeast Asian countries like Thailand mainly because of its low cost and the likelihood of abuse of the post-grant opposition system in which the grant of patent can be canceled. Moreover, the pre-grant opposition system can maintain social benefits for majority of Thai people who are still poor and need aid from developed countries, not advantage-taking. Undoubtedly, pre-grant opposition is essential for the Thai patent registration system because it serves to balance the country's private and public int interests.

.* * * * *



[148] Wagner, R. Polk, *Op. Cit*, p. 36