Country 's Activities and Efforts related to Technology Transfer

The awareness of Intellectual Property Law has been propagated throughout Thailand. The outcomes protected by this law are fully utilized in many levels. It is known that Thailand is democratic and constitutional monarchy with King Bhumiphol Adulyadej, the ninth king of the House of Chakri, as the ruling monarch. With his virtue and intelligence, H.M. The king's royal duties are primarily focused on the well-being of his people which directly beneficial to the country. His Majesty the King Bhumiphol Adulyadej has invented and initiated several following projects which were given to his people:-

- Chaipattana Low Speed Surface Aerator for waste water treatment
 - 2. Vetiver grass for soil and water conservation
 - 3. Artificial rain to prevent water scarcity during drought
 - 4. Irrigation projects to solve flooding problem
- 5. Development project to solve traffic and transportation problems in Bangkok metropolitan area

These inventions and projects have been transferred to and implemented by the governmental agencies as well as the grass-root population which have minimized the poverty in the remote rural area.

Initiation of governmental policies

Every government in the past had structured the country's management policy in relevance to basic state policy in chapter 5 of the Constitution of the Kingdom of Thailand, especially section 86.

State must implement science policies, intellectual property and energy as following:

- 1. Support the development of Science, Technology, and innovations by establishing specific laws providing supporting budget for research and institutes for development, as well as making use of research results, efficient technology transfer, and appropriate human resource development. The development scope also includes spreading scientific and technological know-how so that people can adopt in their living.
- 2. Support the innovation for continuous emergence of new knowledge as well as maintenance and development of local traditional knowledge, Thai's wisdom and protected Intellectual property.
- 3.Initiate and support research development and utilize renewable energy from nature systematically and continuously valuable for the environment

Even The government under the Prime minister Abhisit Vejjajiva has given the policy statement to the associated meetings of a mutual Parliament on December 29, 2008. There are contents on Intellectual Property Laws as following in the governmental policies.

4. Economic Policy

4.2 Reconstruction of economic policy

4.2.2 Industrial sector

4.2.2.3 Cooperate with private sectors in improving quality and product standards in advance of the international level. Support the gathering capital mechanism and risk management assurance for motivating private sectors to invest more in technology and innovation and guarding the rights, intellectual property for the products that manufactured in Thailand and Thailand' Brands.

4.2.4 Marketing Commerce and Investment 4.2.4.5 Support Thai entrepreneur to registering their intellectual property and guarding the rights for goods and Thai products in the foreign market. From the statistical Study, it is found and concluded that entering patent system in Thailand both patent application and granted including Invention and Design shows the ratio of the requested body from the foreigner in higher number than the Thais.

Statistics of Patent Application and Granted (Invention)

Year	Applications			Granted		
	Total	Thai	Foreigner	Total	Thai	Foreigner
2008	6,741	902	5,839	966	62	904
2007	6,818	945	5,873	948	118	830
2006	6,261	1,040	5,221	1,121	118	1,003
2005	6,340	891	5,449	553	62	491
2004	5,373	819	4,554	716	57	659
Total	31,533	4,597	26,936	4,304	417	3,887

Statistics of Patent Application and Granted (Design)

Year	Applications			Granted		
	Total	Thai	Foreigner	Total	Thai	Foreigner
2008	3,820	2,735	1,085	1,219	719	500
2007	3,521	2,533	988	876	544	332
2006	3,560	2,524	1,036	757	450	307
2005	4,545	3,367	1,178	769	443	328
2004	3,569	2,609	960	1,328	810	518
Total	19,015	13,768	5,247	4,949	2,966	1,983

In the opposite way, the statistic for entering Petty Patent protection both application and granted shows the Thais have requested more than the foreigner. This situation has to be identified for the real reason behind. Many researchers created

early the hypothesis that application and granted system of the Petty Patent is simple and faster in comparison with the application and granted system of the Patent.

Statistics of Petty Patent Application and Granted

Year	Applications			Granted		
	Total	Thai	Foreigner	Total	Thai	Foreigner
2008	1,515	1,423	92	711	638	73
2007	1,435	1,354	81	902	852	50
2006	2,062	1,968	94	791	750	41
2005	1,652	1,561	91	609	592	17
2004	1,454	1,390	64	392	364	28
Total	8,118	7,696	422	3,405	3,196	209

Governmental policy which directly impact to activities has been transferred to not only the educational system in the higher level (universities) but also science and technology agency. There was the establishment of agencies or sections that manages and supports the intellectual property which occurred from its research and investment. In general, it is usually called "Technology Licensing office: TLO" as examples such as

- National Science and Technology Development Agency (NSTDA)
- Rajamangala University of Technology Thanyaburi
- Burapha University

In King Mongkut's Institute of Technology Ladkrabang, there was also intellectual property section that originated under the Bureau of Academic Support and Service. Now, There are more than 10 projects which was granted patents.

From the direct experience and supporting knowledge from the government by Department of Intellectual Property, Ministry of Commerce in 2005, the results from the OTOP (One

Tumbol one product) development project with 3 groups of entrepreneur have granted the intellectual property rights as followings:-

- 1. Thai Fabric groups
- 2. Artificial clay flowers
- 3. Synthetic fabric flowers

Application in Intellectual Property system

- 1. Requested application for Trademark (3 issues) for 3 entrepreneurs from 3 new designs
- 2. Requested application for Copyrights (product design) information "Kor Bua artificial clay flower (D.I.Y.) elements and process of assembly elements (D.I.Y.)
- 3. Requested application for Patent "Stretching ban for decorating synthetic fabric" and "Candle with wire leg"
- 4. Requested application for Copyrights (product design) information "Cup with the stretching ban"
- 5. Requested application for Patent of "Box" (Packaging for decorations on dining table)
- 6. Requested application for Petty patent "Artificial clay flowers box"
- 7. Requested application for Copyrights "Window display on retail store" from design

Moreover, there is another result that the working group proposed for business in the knowledge of silk improvement for smooth and flutter, the requested application for Trade secret has been added. Totally there are 11 applications as a result from the project.

In addition, There is a development of personal vehicle which is cooperated with National Innovation Agency (NIA) and industrial entrepreneur. The result of this project was requested for application for patent protection.



Cooperated Projects supported by National Innovation Agency (NIA) initiated final project of design students to entering patent and intellectual property law in 2005.