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Legal Framework for Intangible Assets in Turkey

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LEGAL FRAMEWORK FOR INTANGIBLE ASSETS IN TURKEY[1]

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Abstract

Intangible assets (IA) are one of the emerging concepts which have recently entered in the innovation studies. There are different associations of IA concept with accounting, business management and organisational management. However, our approach on the IAs, considers the legally protected intellectual assets of organizations in addition to their physical, financial and technical ownerships. In other words, we consider IPR as the main component of the intangible assets and propose that it plays a major role in trade, knowledge diffusion, technology transfer and innovation collaborations. We also argue at Intangible Asset based management should be incorporated into business management and regional development policies. Within this framework, the paper presents the current regulatory structure of Turkey in terms of protection and economizing these assets. Since it is an evaluation of current IPR system analysis, the paper surveys the literature and legal national documents to give insights about the recent changes and trends of Turkey in the integration process with EU and other neighbourhood countries.

Key Words: Intangible Assets, IPR, Turkey, Regional Policy

[1] Research funded by the EU Commission FP7 project SEARCH, Sharing Knowledge Assets: Interregionally cohesive neighbourhoods

1. Introduction

A company is a complex entity in many levels. It is composed of people, technology, money, organisation, trust and power relations, missions, skills, experience and so on. To survive in today's economy, companies have to be innovative. As it is known, innovation is an interactive process with these internal constituents and bunch of other external actors. The dynamic and simultaneous interaction of defined and undefined factors make it even harder to apprehend. So much that, understanding innovation in a single company may become an individual challenge. Through its life cycle, the company encounters with some practices that it has to keep up with, excel upon, abandon and master. In this environment, the abilities of the firm to perform these course of actions on an organisational level, depends on its assets and capabilities. When we say assets, the immediate associations are physical assets such as equipment or production infrastructure and financial assets. However, beyond them, there are employee's experience and capabilities which can be conceptualized under the human capital and intellectual capital. It can be said that, these capabilities are the real assets of a company, which help them to survive in the market competition. Acknowledging this, has bring forth the importance of the intangible assets by business experts and researchers. However, intangible assets (IAs) are different from other assets. The major difference lies underneath the knowledge content they have. The reason they are called "intangible" is due to two factors. First, they are physically intangible. Second, they cannot easily measured and represented with numbers objectively.

The concept of IA has many associations in different research fields. Recently, there has been studies going on in the searches of how to profit from intangible assets in many fronts. Although the concept of Intangible Assets has not been matured yet, Intellectual Property Rights are accepted as a prominent component of IAs. Our goal in this paper is to evaluate the current system of IPR in Turkey under the scope of Intangible Assets. Therefore, in section 2, the theoretical framework that links IPR and intangible assets will be given. In this section, we will also provide basic definitions and general categorisation of IPR. In section 3, we will make a survey of national legislation of industrial, intellectual and other rights in Turkey. Following this, in section 4, we will elaborate on the structure of IPR system with its main actors and implementation process by providing some recent data. Finally in section 5, we will address the problems of Turkish IPR system in comparison with European Union countries and make conclusions.

2. Intangible Assets and IPR

2.1. Theoretical Framework

Intangible Assets (IA) is an emerging concept which has recently entered the innovation literature. It can be proposed that, the efforts to understand, measure and benefit from intangibles have started with the considering knowledge as an important and principal production factor as other traditional factors in the economy by Drucker (1993). In other words, we can state that Intangible Assets are one of the recent phenomenon of knowledge economy, on strategic management of the company. In addition, the importance of knowledge generation abilities of company's on competitiveness can be found in the works of Nonaka & Takeuchi (1995). Since, intellectually creative ideas are the important determinant of the innovation capability.

There is a mingled usage of intellectual capital and intellectual assets. The former mostly refer to the human capital. However, the term asset refers to ownerships. In this sense, our approach on the IAs emphasize the legally protected ownership of intellectual works. Previously, this concept has been associated with different disciplines. For instance, the accounting literature has mostly elaborated on the issue of external financial reporting of intangible assets, defining them ''a non-physical source of expected future benefits'' (Abernathy et al., 2003, p. 17). Intangible assets are defined as assets arising as a result of past events and possess three main attributes: they are non-physical in nature, they are capable of producing future economic net benefits, and they are protected legally or through a de facto right (Kramer et al, 1999).

According to Handy (1989), the intellectual assets of a corporation are usually three or four times tangible book value. Ross, Ross, Dragonetti, and Edvinsson (2001) define intellectual capital as that which includes all the processes and assets that usually do not appear on the balance sheet, as well as all the intangible assets used in modern accounting methods such as trademarks, patents and copyrights. In his study on valuing the innovative assets, (Hall 1999), finds out that market value of the modern manufacturing corporation is strongly related to its knowledge assets.

Organisational knowledge and learning capability of a firm have often seen as an important determinant of company's competitiveness. Business strategy scholars have focused on conceptual frameworks for identifying, collecting and analysing intangibles for internal management purposes, defining IAs as ''resources that are not visible in the balance sheet, but that add value to the enterprise'' (Edvinsson, 1997, p. 322).

The concept of intellectual capital has categorized with three sub- components. These are, human capital, structural capital and relational capital. Human capital refers to the knowledge embodied in employees, relational capital, which refers to the knowledge embedded in the

relationships with any stakeholder that influences the organization's life structural capital refers to the organization's capabilities to meet its internal and external challenges (do Rosário Cabrita & Vaz, 2005). Brooking (1996) divides intellectual capital into four categories: market assets, intellectual property, infrastructure and human-centred capital in Ortiz (2012).

Stewart (1997) defines intellectual capital as "the intellectual material – knowledge, information, intellectual property, experience – that can be put to use to create wealth. Other studies on intellectual capital can be found in Hall (1999), Brooking (1996), Sveiby (1997), Roos et al. (1997), Edvinsson and Malone (1997), Bontis 1998, (Lev 2001). Below, in Figure 1, the link between IPR and intangible assets is given.

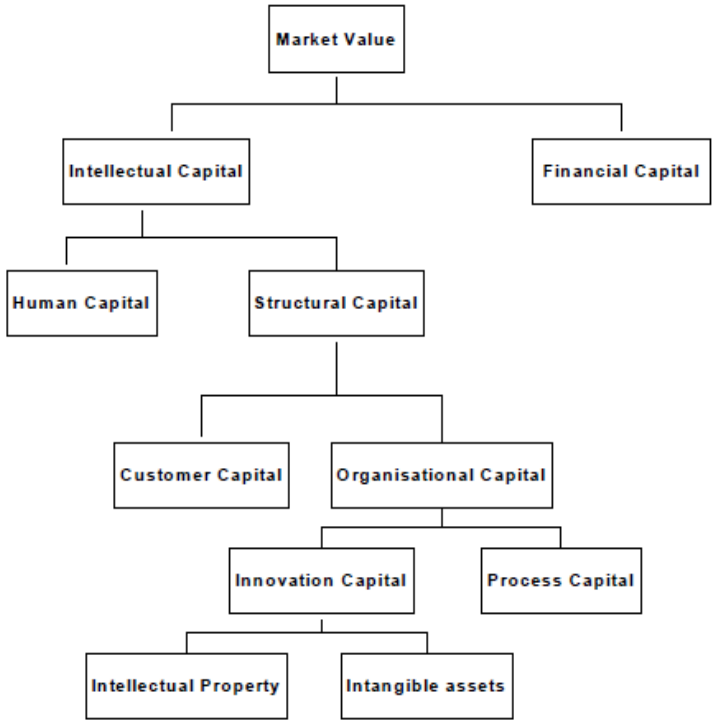


Figure 1: The link between intellectual capital and IP by Edvinsson (1997). [2]

In an alternative view, Harrison and Sullivian (2002:2) define intellectual capital as "knowledge that can be converted into profit". Marr et al. (2004:3) argue that true value of a company can only be assessed by taking intangible assets into account. Therefore, measuring IC appears to be particularly useful for accounting purposes since it allows organisations to place a value on their intangible assets. Acknowledging the tangible effects of the IA of a company, business managers have started to seek for the ways to appropriate the benefits and "extraction of value

[2] Taken from : http://www2.warwick.ac.uk/fac/soc/wbs/conf/olkc/archive/oklc5/papers/k-4_srivihok.pdf

from innovation" has become a hype issue (Harrison and Sullivian, 2000: 1) Companies can benefit from their intellectual assets by making the unprotected technologies protected. Patents can be used to develop business opportunities. Cost saving and revenue increase can be achieved.

According to Teece (2003) a company's competitive power and innovation performance is also determined by its assets. Hence, these assets are grouped under six titles. These are technological, complementary, financial, reputational, and institutional and market assets. Firm's reputation is also included to intangible assets as "reputational assets", since it reflects the overall assets and current position of the firm. It also enables to interpret the future behaviour.

IPR is a strategic asset for companies. Lev (2001) includes products and services, customer relations, human resources and organisational capital in his taxonomy of intangibles. Intellectual assets are the part of the innovation management. Protection of intangible assets help innovators to profit from innovate. Intangible assets are those money cannot buy? Intellectual assets can be legally protected. Sumita (2008) indicates that İntellectual asset based management has developed to realize and manage innovation. He argues that "recruiting is not enough" and the corporate value of hiring highly-educated people can only be gained by such an innovation approach. He also asserts that in the case of open innovation companies need to evaluate its intellectual assets and capabilities since it is a case which outside knowledge, specific knowledge, knowledge exchange. Strategic capability on the IPR is necessary for exploiting the benefits of patents and R&D.

IAbM can be also reflected into national policy level. Sumita (2008) argues that adopting an IAbM based national innovation policies have advantages. First, it helps to acknowledge the companies own strengths and results better decisions to utilize external knowledge or technology. By this way, it is expected to generate better results for efficiency and resource allocation. Secondly, identifying the intangible assets of SMEs can expand the collaboration options with other companies and regions.

2.2. Definition of Intellectual Property Rights

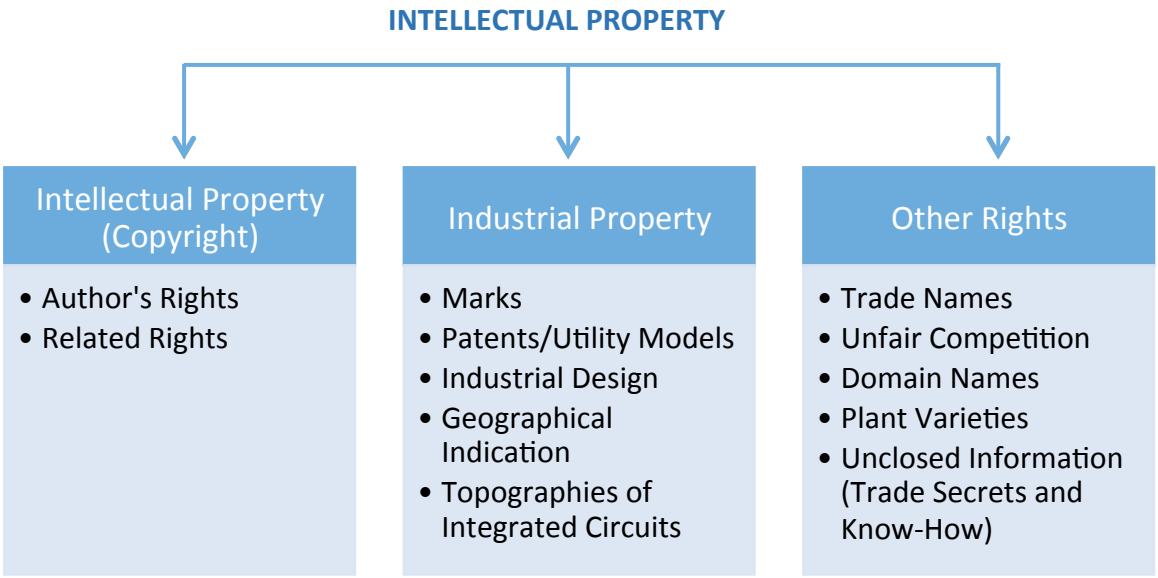


Figure 2: Types of IPR in Turkey

Intellectual property (IP) refers to creations of the mind: inventions, literary and artistic works, and symbols, names, images, and designs used in commerce[3].

Patent describes an invention and creates a legal situation in which the patented invention can normally only be exploited (manufactured, used, sold, imported) with the authorization of the owner of the patent[4].

Utility Models differ from inventions for which patents for invention are available mainly in two respects. First, the technological progress required is smaller than the technological progress ("inventive step") required in the case of an invention for which a patent for invention is available. Second, the maximum term of protection provided in the law for a utility model is generally much shorter than the maximum term of protection provided in the law for an invention for which a patent for invention is available[5].

Copyright: Copyright law is a branch of that part of the law which deals with the rights of intellectual creators. It deals with particular forms of creativity, concerned primarily with mass communication. Copyright deals with the rights of intellectual creators in their creation. Copyright protection is

[3] http://www.wipo.int/about-ip/en/index.html
[4] http://www.wipo.int/export/sites/www/about-ip/en/iprm/pdf/ch2.pdf
[5] http://www.wipo.int/export/sites/www/about-ip/en/iprm/pdf/ch2.pdf

above all one of the means of promoting, enriching and disseminating the national cultural heritage[6].

Related Rights: There exist rights related to, or "neighbouring on", copyright. These rights are generally referred to as "related rights" (or "neighbouring rights,"). There are three kinds of related rights: the rights of performing artists in their performances, the rights of producers of phonograms in their phonograms, and the rights of broadcasting organizations in their radio and television programs. Protection of those who assist intellectual creators to communicate their message and to disseminate their works to the public at large, is attempted by means of related rights.

Industrial rights and other rights will be examined in section 4.

3.1. National Legislation on Industrial Property Rights in Turkey

Table 1. Patents and Utility Models

Decree-Law No. 551 of June 24, 1995 on the Protection of Patent Rights (as last amended by the Decision of the Constitutional Court No. 2009/19 of February 5, 2009) (2009)
Implementing Regulations to the Convention on the Grant of European Patents (EPO) (as last amended by Law No. 26883 of May 22, 2008) (2008)
Regulation dated 01.04.2005 on Implementing Patent Cooperation Treaty (PCT)
Law No. 4128 of November 7, 1995 on the Amendments to the Decree-Laws No. 551, 552, 554, 555, 556 and 560 (1995)
Implementing Regulations under Decree-Law No. 551 of June 24, 1995 on the Protection of Patent Rights (as last amended by Regulation No. 27207 of April 21, 2009) (2009)

Source: **http://www.wipo.int/wipolex/en/profile.jsp?code=TR ,** Yalçıner (2000), Analysis Report on Existing Situation of National Intellectual Property, Turkish Patent Institute (TPI), May 2013

[6] http://www.wipo.int/export/sites/www/about-ip/en/iprm/pdf/ch2.pdf

Table 2. Trademarks

Decree-Law No. 556 of June 24, 1995 on the Protection of Trademarks (as last amended by Law No. 5833 of January 21, 2009) (2009)
Law No. 5833 of January 1, 2009 on the Amendment of the Decree-Law No. 556 of June 24, 1995 on the Protection of Trademarks (2009)
Law No. 5194 of June 22, 2004 Amending Decree-Laws No. 551, 556, 554 and 555 (2004)
Law No. 4128 of November 7, 1995 on the Amendments to the Decree-Laws No. 551, 552, 554, 555, 556 and 560 (1995)
Implementing Regulations under Decree-Law No. 556 of June 24, 1995 on Protection of Trademarks (2005)
Regulation dated 12.03.1999 on Implementing Madrid Agreement and Protocol for International Registration of Marks

Source: **http://www.wipo.int/wipolex/en/profile.jsp?code=TR ,** Yalçıner (2000), Analysis Report on Existing Situation of National Intellectual Property, Turkish Patent Institute (TPI), May 2013

Table 3. Industrial Designs

Decree-Law No. 554 of June 24, 1995 on the Protection of Industrial Designs (as last amended by the Decision of Constitutional Court of February 5, 2009) (2009)
Law No. 5194 of June 22, 2004 Amending Decree-Laws No. 551, 556, 554 and 555 (2004)
Law No. 4128 of November 7, 1995 on the Amendments to the Decree-Laws No. 551, 552, 554, 555, 556 and 560 (1995)
Implementing Regulations under Decree-Law No. 554 of June 27, 1995 on the Protection of Industrial Designs (2009)

Source: **http://www.wipo.int/wipolex/en/profile.jsp?code=TR ,** Yalçıner (2000), Analysis Report on Existing Situation of National Intellectual Property, Turkish Patent Institute (TPI), May 2013

Table 4. Geographical Indications

Decree-Law No. 555 of June 27, 1995 on the Protection of Geographical Indications (as last amended by Decision of the Constitutional Court No. 2009/16 of March 12, 2009) (2009)
Implementing Regulation on Decree-Law No. 555 of June 27, 1995 on the Protection of Geographical Indications
Regulation on Amendment of Implementing Regulation Decree-Law No. 555 of June 27, 1995 on the Protection of Geographical Indications (21.04.1999)
Law No. 5805 of October 25, 2008 Amending the Decree-Law No. 555 of June 27, 1995 on the Protection of Geographical Indications (2008)
Law No. 5194 of June 22, 2004 Amending Decree-Laws No. 551, 556, 554 and 555 (2004)
Law No. 4128 of November 7, 1995 on the Amendments to the Decree-Laws No. 551, 552, 554, 555, 556 and 560 (1995)
Implementing Regulations under the Decree-Law No. 555 of June 27, 1995 on the Protection of Geographical Indications (as last amended by Regulation No. 27207 of April 21, 2009) (2009)
Implementing Regulations under the Decree-Law No. 555 of June 27, 1995 on the Protection of Geographical Indications (1995)

Source: **http://www.wipo.int/wipolex/en/profile.jsp?code=TR ,** Yalçıner (2000), Analysis Report on Existing Situation of National Intellectual Property, Turkish Patent Institute (TPI), May 2013

Table 5. Topographies of Integrated Circuits

Law No. 5147 of April 22, 2004 on the Protection of Integrated Circuits Topographies (as last amended by Law No. 5728 of January 23, 2008) (2008)
Implementing Regulation dated 30.12.2004 on Law No. 5147 of April 22, 2004 on the Protection of Integrated Circuits Topographies
Implementing Regulations under Law No. 5147 on Protection of Integrated Circuits (2004)

Source: **http://www.wipo.int/wipolex/en/profile.jsp?code=TR ,** Yalçıner (2000), Analysis Report on Existing Situation of National Intellectual Property, Turkish Patent Institute (TPI), May 2013

3.2. National Legislation Related to Other Rights

Table 6: Trade Names, Unfair Competition, Plant Varieties, Internet Domain Names and Undisclosed Information

Trade Names
Turkish Commercial Code (Law No. 6102 of January 13, 2011) (2011)
Unfair Competition
Turkish Commercial Code (Law No. 6102 of January 13, 2011) (2011)
Plant Vareities
Law No. 5553 dated 31.10.2006 on Seeds
Law No. 5042 dated 08.01.2004 on the Protection of Plant Breeders' Rights for New Plant Varieties dated 08.01.2004 (2008)
Regulation dated 13.01.2008 on Registration of Plant Varieties (2009)
Regulation on Genetically Modified Organisms (GMO) and Products (2010)
Regulation on the Working Principles of the Biosafety Board and Committees (2010)
Regulation on the Devolution of Power on Certifications on Seed Sector (2008)
Regulation on Employees of Public Institutions and Agencies Benefiting from the Breeders' Rights (2008)
Implementing Regulations dated 12.08.2004 on Protection of Plant Breeders' Rights for New Plant Varieties (2008)
Regulation dated 12.08.2004 on Principles for Farmers Exemption
Internet Domain Names
Regulation on Domain Names (2010)
Undisclosed Information
Law No. 1211 dated 14.1.1970 on Central bank of Republic of Turkey
Law No. 4054 dated 07.12.1994 on Competition Law

Law No. 5237 dated 26.9.2004 on Turkish Criminal Law
Law No. 5411 dated 19.10.2005 on Banking
Law No. 5454 dated 23.2.2006 on Bank Cards and Credit Carts
Communiqué on the Regulation of the Right of Access to the Files and Protection of Trade Secrets Communiqué No. 2010/3 (2010) Law No. 6102 dated 13.01.2011 Turkish Commerce Law
Law No. 6362 dated 06.12.2012 on Capital Market Law
Law No. 4982 dated 09.10.2003 on Obtaining Information

Source: **http://www.wipo.int/wipolex/en/profile.jsp?code=TR ,** Yalçıner (2000), Analysis Report on Existing Situation of National Intellectual Property, Turkish Patent Institute (TPI), May 2013

4. Properties of IPR System

The legal basis for the granting of patent and trade mark rights in Turkey goes back to the 19th century. Patent protection was based on the Patent Law of March 23 1879, and the protection of trademarks was introduced in the year 1871. There was no special legislation for the protection of industrial designs, geographical indications and topographies of integrated circuits in Turkey before 1995. The administration of industrial property legislation, encompassing only trade mark and patent protection, was entrusted to a department of the Ministry of Industry and Trade until June 24 1994. Turkey was party to only the London Act of the Paris Convention and the Convention establishing the World Intellectual Property Organization (WIPO).

4.1 Institutional Framework

Institutional framework for having strong intellectual and industrial property protection in a country needs following elements.

- National and international legislation
- Administrative institutions
- Intellectual and Industrial Property Civil and Penal Courts
- Attorneys/representatives

Basic elements for copyright and related rights and industrial property rights are shown in the figures below.

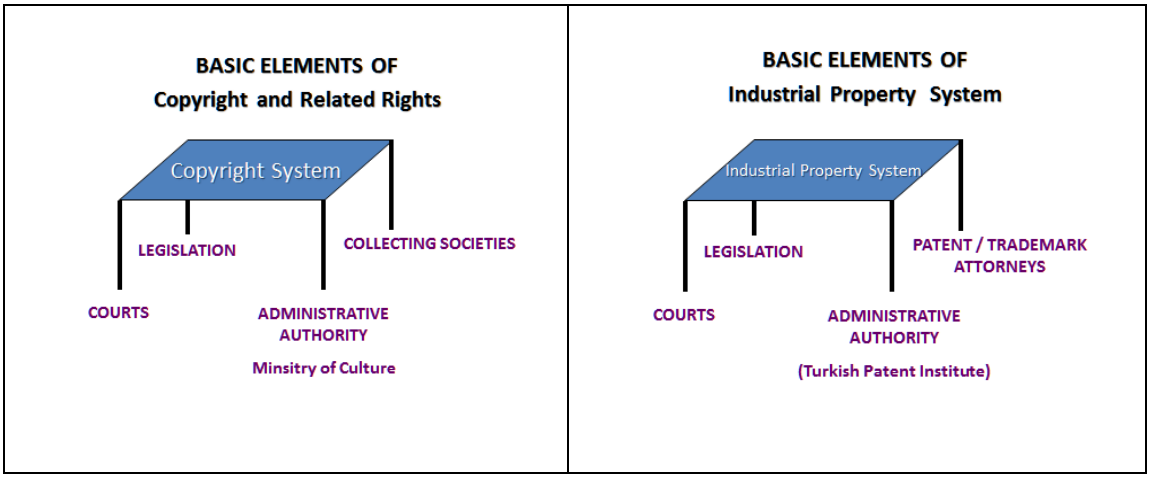


Figure 3: Basic elements for copyright and related rights and industrial property rights

National and international legislation in Turkey has been explained above. Other elements are explained below.

4.1.1 Administrative Institutions (Turkish Patent Institute and Ministry of Culture and Tourism)

The administrative institution for copyright and related rights is the Ministry of Culture and Tourism. Turkish Patent Institute (TPI) is the authorized government authority for industrial property issues. The related legislation for administrative authorities is below.

- Decree Law 544 Dated 24 June 1994 and the Law No. 5000 of November 6, 2003 on the Establishment and Functions of the Turkish Patent Institute (as last amended by the Decision of Constitutional Court of January 31, 2008) (2008)
- Law No. 4848 dated 29.04.2003 on Establishment and the Functions of Ministry of Culture and Tourism

The establishment of the Turkish Patent Institute (TPI) in 1994 is the milestone of a new and modern industrial property system in Turkey. The TPI is a special government authority with administrative and financial autonomy, responsible for the administration of all industrial property rights and related international agreements to which Turkey is party. Today, the TPI operates under the Ministry of Science, Industry and Technology. The TPI's main and auxiliary departments have about 400 staff working in the specially built 32,000 m2 building. It has a special organ, the Re-examination and Evaluation Board, entrusted with the final decisions of the Institute. It is an appeal board of sorts for the Institute and the decisions of the board are open to court actions in a non-extendable two month period for trademarks and a non-extendable 60 days for the other rights such as patents and designs. The Turkish Patent Institute realizes the necessary protective function of industrial property rights in Turkey. This is the fundamental and best organized function of the

Institute. It performs an information function by keeping systematized and convenient collections of national and international documents related to industrial property.

4.1.2 Intellectual and Industrial Property Civil and Penal Courts

Under the intellectual and industrial property rights legislation, specialized IP courts have been established at the beginning of the last decade. In the year 2011, there are seven IP civil courts and seven IP criminal courts in Istanbul; four IP civil courts and two IP criminal courts in Ankara; and one IP civil court and two IP criminal courts in _İzmir. In the other cities general civil and general criminal courts have been assigned as competent courts to deal with IP cases. The IP civil courts in Ankara are also responsible for the cases against the decisions of Turkish Patent Institute

4.1.3 Patent and Trademark Attorneys

IP legislation in force in Turkey has special provisions for qualification and registration of patent and trade mark attorneys. The patent and trade mark attorneys are selected according to a qualification examination given by the TPI. According to the records at mid-year 2013, 455 patent and 790 trademark attorneys are registered and actively working in Turkey. Legislation related to patent and trademark attorneys is below.

- Law No. 5000 of November 6, 2003 on the Establishment and Functions of the Turkish Patent Institute (as last amended by the Decision of Constitutional Court of January 31, 2008) (2008)
- Turkish Code of Obligations (Law No. 6098 of January 11, 2011)
- Regulation on Turkish Patent Institute Agents Patent Examination on Trademark and Patent Attorney and Registry

As far as there are some special provisions for qualification and registration of patent and trade mark attorneys in Turkey there is no provision for internal administrative structure such as chamber or Union. Additionally there are no provisions for discipline and penalties for regulating the code of conduct of the patent and trademark attorneys.

4.2 Implementation of IPR Legislation in Turkey

Patents and utility models

Inventions can be protected by patents for inventions that are novel, involve inventive step and industrially applicable and utility model certificates for the inventions that are novel and industrially applicable and not a process or chemical product. The protection period is seven years

for non-examined patents, 10 years for utility models and 20 years for examined patents. Procedures for patent applications in Turkey are shown below.

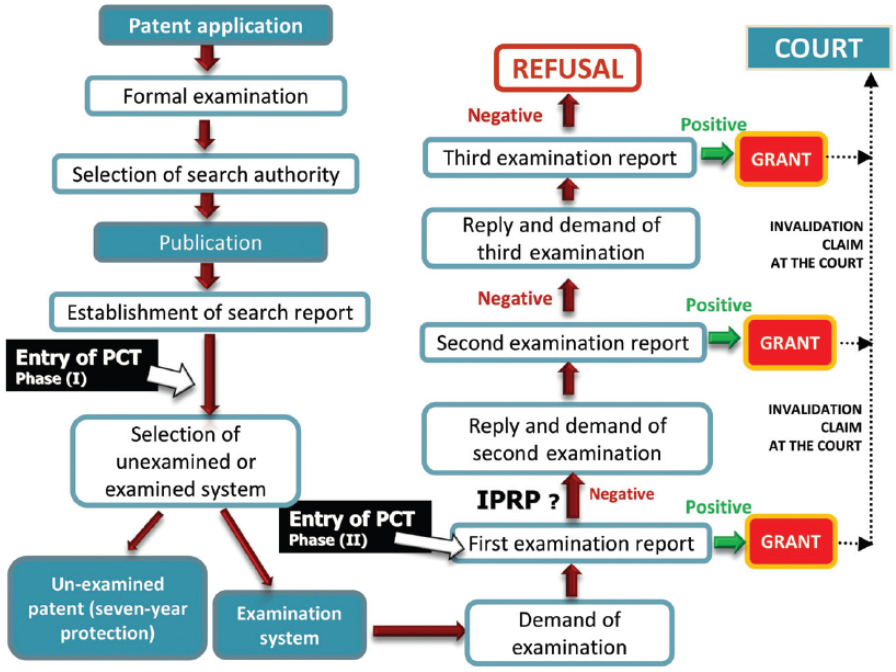


Figure 4 - Procedures for patent applications in Turkey[7]

The period of PCT national phase applications in Turkey is 30 months (plus three with an additional fee) for phase I and II entries. Validation of EPC patents is three months (non-extendable) starting from the publication date of mention of grant of the European patent. Translations may be filed later with an additional fee.

Patent Protection on Pharmaceutical Products and Processes

Turkey is one of the countries which signed and ratified the Agreement Establishing World Trade Organization. This Agreement has entered into force in all member states in January 1, 1995. As it is clearly known that the developed countries had 1 year transition period for adoption of national legislation making them being compatible to TRIPS Agreement. The developing countries of which Turkey is one of them had 4 more years for reflecting the provisions of TRIPS to their national legislation. This period has ended in January 1, 2000.

[7] Ugur G Yalçiner and Irmak Yalçiner, "IP, Past Present and Future" www.managingip.com September 2011

Although having totally 5 years transition period up to the year 2000, Turkey has adopted its national industrial property legislation for patents, trademarks, industrial designs and geographical signs in June 1995. All elements of this legislation are not only compatible to TRIPS standards but also contain many better and more effective provisions. This progress shows that Turkey is the first developing country which amended its national legislation according to TRIPS Agreement. When the situation in all other developed countries has been analyzed, it will easily be understood that Turkey has adopted new legislation being compatible to TRIPS Agreement before than most of the developed and all of developing countries.

Patent protection of the pharmaceuticals has been excluded from the patent protection by the Transitional Provision 4 of the above mentioned Decree Law No. 551 up to January 1, 2000 for processes and January 1, 2005 for products. Although this provision is compatible to Article 65/1, 65/2 and 65/4 of the TRIPS Agreement. This Article of the Decree Law has been amended by the new Decree Law 566 on September 22, 1995. Amended Article has excluded the patent protection of both pharmaceutical processes and products up to January 1, 1999.

Turkey as being a party to the Agreement of Establishing World Trade Organization, the provisions of the Article 70/8 and 70/9 of TRIPS Agreement have been applied. This means that all the patent applications related to the pharmaceuticals have been filed to the Turkish Patent Institute since January 1, 1995. Article 70/9 which states exclusive marketing right for a period of five years to the applicant of the patents according to Article 70/8 who obtained patent and marketing approval related to that product in any member country has not been applied in Turkey, because Turkey has started to accept patent protection in pharmaceutical products and processes on January 1, 1999.

Total number of patent applications received by Turkish Patent Institute after January 1, 1995 until end of 2000, according to the Article 70/8 of TRIPS Agreement is more than 2000. Although a transition period of 5 years for the developing countries, and that of 10 years for the underdeveloped countries have been given in order to enact legislation in the matters they did not provide protection on the effective date of the Agreement, according to Article 65 of Intellectual property Rights Related to Trade Annexed to World Trade Organization Agreement, the obligation to transact the pharmaceuticals patent applications has been brought for the countries applying transition period according to the provisions of clause 8 of Article 70 of the same Agreement. As required by this provision, Turkish Patent Institution has started to transact all pharmaceuticals patent applications as of January 1, 1995. All the pharmaceuticals patent applications are being reviewed by the Turkish Patent Institute according to the provisions of patent law, no matter

whether they are process or product patent. This review is being carried out as the stages of search report preparation and examination report preparation, as applied to the other patent applications.

Turkish patent legislation doesn't include pipeline protection and supplementary protection provisions for pharmaceutical inventions.

As conclusion, it can be said;

- The pharmaceuticals which are protected by patent legislation shall be produced and marketed by only the patent holder.
- The pharmaceuticals which may be protected by patent legislation are the only ones which have been applied to Turkish Patent Institute (TPI) since January 1, 1995.
- The generics of the pharmaceuticals which have been applied to TPI for product patents may not be produced.

Statistical information on patent and utility models are below.

Table 7: Patent Applications

Year	Domestic					Foreign					TOTAL	General Increase Rate
	TPI	PCT	EPC	Total	Increase rate	TPI	PCT	EPC	Total	Increase Rate		
2007	1747	60	31	1838	68,62%	71	139	4141	4351	6,77%	6189	19,83%
2008	2159	69	40	2268	23,39%	68	107	4694	4869	11,91%	7137	15,32%
2009	2473	74	41	2588	14,11%	69	105	4479	4653	-4,44%	7241	1,46%
2010	3120	60	70	3250	25,58%	77	100	4916	5093	9,46%	8343	15,22%
2011	3962	43	82	4087	25,75%	120	100	5934	6154	20,83%	10241	22,75%
2012	4360	74	109	4543	11,16%	78	154	6824	7056	14,66%	11599	13,26%

Source: Analysis Report on Existing Situation of National Intellectual Property, Turkish Patent Institute (TPI), May 2013

Table 8: Patent Grants

Year	Domestic					Foreign					TOTAL	General Increase Rate
	TPI	PCT	EPC	Total	Increase rate	TPI	PCT	EPC	Total	Increase Rate		
2007	183	114	21	318	160,66%	130	202	4140	4472	6,91%	4790	11,27%
2008	253	48	37	338	6,29%	96	154	4281	4531	1,32%	4869	1,65%
2009	341	68	47	456	34,91%	93	149	4912	5154	13,75%	5610	15,22%
2010	507	66	69	642	40,79%	83	110	4675	4868	-5,55%	5510	-1,78%
2011	714	59	74	847	31,93%	56	67	5569	5692	16,93%	6539	18,68%
2012	879	44	102	1025	21,02%	28	53	6710	6791	19,31%	7816	19,53%

Source: Analysis Report on Existing Situation of National Intellectual Property, Turkish Patent Institute (TPI), May 2013

Table 9: Utility Model Applications

Year	Domestic				Foreign				TOTAL	General Increase Rate
	TPE	PCT	Total	Increase Rate	TPE	PCT	Total	Increase Rate		
2007	2972	0	2972	22,61%	41	3	44	37,50%	3016	22,80%
2008	2946	3	2949	-0,77%	34	3	37	-15,91%	2986	-0,99%
2009	2842	0	2842	-3,63%	36	4	40	8,11%	2882	-3,48%
2010	2992	2	2994	5,35%	36	3	39	-2,50%	3033	5,24%
2011	3174	1	3175	6,05%	67	2	69	76,92%	3244	6,96%
2012	3722	3	3725	17,32%	57	6	63	-8,70%	3788	16,77%

Source: Analysis Report on Existing Situation of National Intellectual Property, Turkish Patent Institute (TPI), May 2013

Table 10: Utility Model Grants

Year	Domestic				Foreign				TOTAL	General Increase Rate
	TPI	PCT	Total	Increase Rate	TPI	PCT	Total	Increase Rate		
2007	2148	0	2148	29,01%	29	4	33	32,00%	2181	29,05%
2008	1833	0	1833	-14,66%	31	5	36	9,09%	1869	-14,31%
2009	2148	3	2151	17,35%	26	2	28	-22,22%	2179	16,59%
2010	2021	1	2022	-6,00%	24	3	27	-3,57%	2049	-5,97%
2011	1946	2	1948	-3,66%	25	3	28	3,70%	1976	-3,56%
2012	2241	4	2245	15,25%	47	7	54	92,86%	2299	16,35%

Source: Analysis Report on Existing Situation of National Intellectual Property, Turkish Patent Institute (TPI), May 2013

According to above statistical information, the followings can be commented.

- Patent applications are mainly filed by foreign applicants,
- Utility model applications are mainly filed by domestic applicants,
- In the last years domestic applications in patents are rapidly increasing,
- In 2010 domestic applications in patents are higher than domestic applications in utility models

Trademarks

By law, trade mark rights are obtained by registration before TPI. Unregistered trademarks are protected by general provisions under commercial law. Trademarks could be registered as word marks or device marks along with the product or the packaging. However, the registration of the product or the packaging does not grant exclusive rights to the right holders. Moreover, registration of sound marks is also possible. Registration procedures are performed in two steps. First is ex-officio examination on absolute grounds. According to Turkish legislation absolute grounds are exactly the same as OHIM implementation. Additionally to OHIM, in this step TPI refuses the applications of the trade marks identical or confusingly similar with a trade mark registered earlier or

with an earlier date of application for registration in respect of an identical or same type of goods and services. This provision makes preliminary availability searches before filing the applications more and more important. The second step is publication of the application and opposition by third parties. There are seven different conditions for filing an opposition after publication including the earlier unregistered rights, copyrights and un-renewed trade mark rights. Figure 5 is flow diagram of trade mark procedures in Turkey. Under the Turkish trade mark system, if within a period of five years following the issue of the registration certificate, the registered trade mark has not been put to use without a justifiable reason or if the use has been suspended during an uninterrupted period of five years, the trade mark shall be repealed. Procedures for trademark applications and registrations in Turkey are shown below.

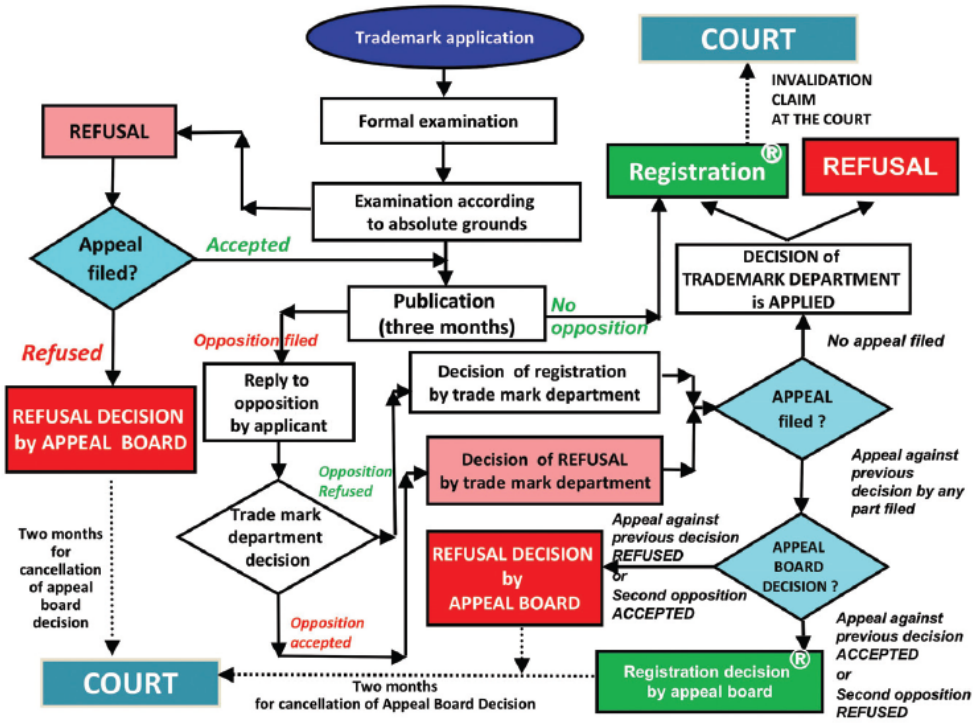


Figure 5: Procedures for trademark applications in Turkey[8]

Statistical information on trademarks are below.

[8] Ugur G Yalçiner and Irmak Yalçiner, "IP, Past Present and Future" www.managingip.com September 2011

Table 11: Trademark Applications

	Domestic		Foreign							
					Madrid Protocol Applications					
Year	Number of Applications	Increase Rate	Number of Applications	Increase Rate	Number of Applications	Number of Applications	Total	Increase Rate	Total	Increase Rate
2007	58713	**7,16%**	3925	**11,19%**	9995	**17,08%**	**13920**	**15,36%**	**72633**	**8,64%**
2008	60597	**3,21%**	4229	**7,75%**	10165	**1,70%**	**14394**	**3,41%**	**74991**	**3,25%**
2009	59838	**-1,25%**	3624	**-14,31%**	8142	**-19,90%**	**11766**	**-18,26%**	**71604**	**-4,52%**
2010	73142	**22,23%**	4083	**12,67%**	7903	**-2,94%**	**11986**	**1,87%**	**85128**	**18,89%**
2011	103747	**41,84%**	4724	**15,70%**	9252	**17,07%**	**13976**	**16,60%**	**117723**	**38,29%**
2012	97269	**-6,24%**	4751	**0,57%**	9100	**-1,64%**	**13851**	**-0,89%**	**111120**	**-5,61%**

Source: Analysis Report on Existing Situation of National Intellectual Property, Turkish Patent Institute (TPI), May 2013

Table 12: Trademark Registrations

	Domestic		Foreign							
					Madrid Protocol Applications					
Year	Number of Applications	Increase Rate	Number of Applications	Increase Rate	Number of Applications	Number of Applications	Total	Increase Rate	Total	Increase Rate

2007	40757	**17,99%**	3537	**19,78%**	10726	**162,19%**	**14263**	**102,48%**	**55020**	**32,30%**
2008	35543	**-12,79%**	3195	**-9,67%**	8587	**-19,94%**	**11782**	**-17,39%**	**47325**	**-13,99%**
2009	41414	**16,52%**	3918	**22,63%**	11589	**34,96%**	**15507**	**31,62%**	**56921**	**20,28%**
2010	32397	**-21,77%**	2806	**-28,38%**	8961	**-22,68%**	**11767**	**-24,12%**	**44164**	**-22,41%**
2011	35858	**10,68%**	2788	**-0,64%**	3413	**-61,91%**	**6201**	**-47,30%**	**42059**	**-4,77%**
2012	52416	**46,18%**	3683	**32,10%**	8670	**154,03%**	**12353**	**99,21%**	**64769**	**54,00%**

Source: Analysis Report on Existing Situation of National Intellectual Property, Turkish Patent Institute (TPI), May 2013

Industrial designs

After 1994, industrial design rights started to be protected by registration if the design is new and has an individual character. Unregistered designs are protected by general provisions. Registration procedure is performed without examination. The industrial design applications are published for opposition by third parties. The procedures for design protection in Turkey are similar to the system applied in European Countries. Figure 6 is flow diagram of industrial design procedures in Turkey. The term of protection is five years and can be renewed up to 25 years. According to the Turkish design protection system, deferment of publication and multiple applications are possible. Procedures for industrial design applications and registrations in Turkey are shown below.

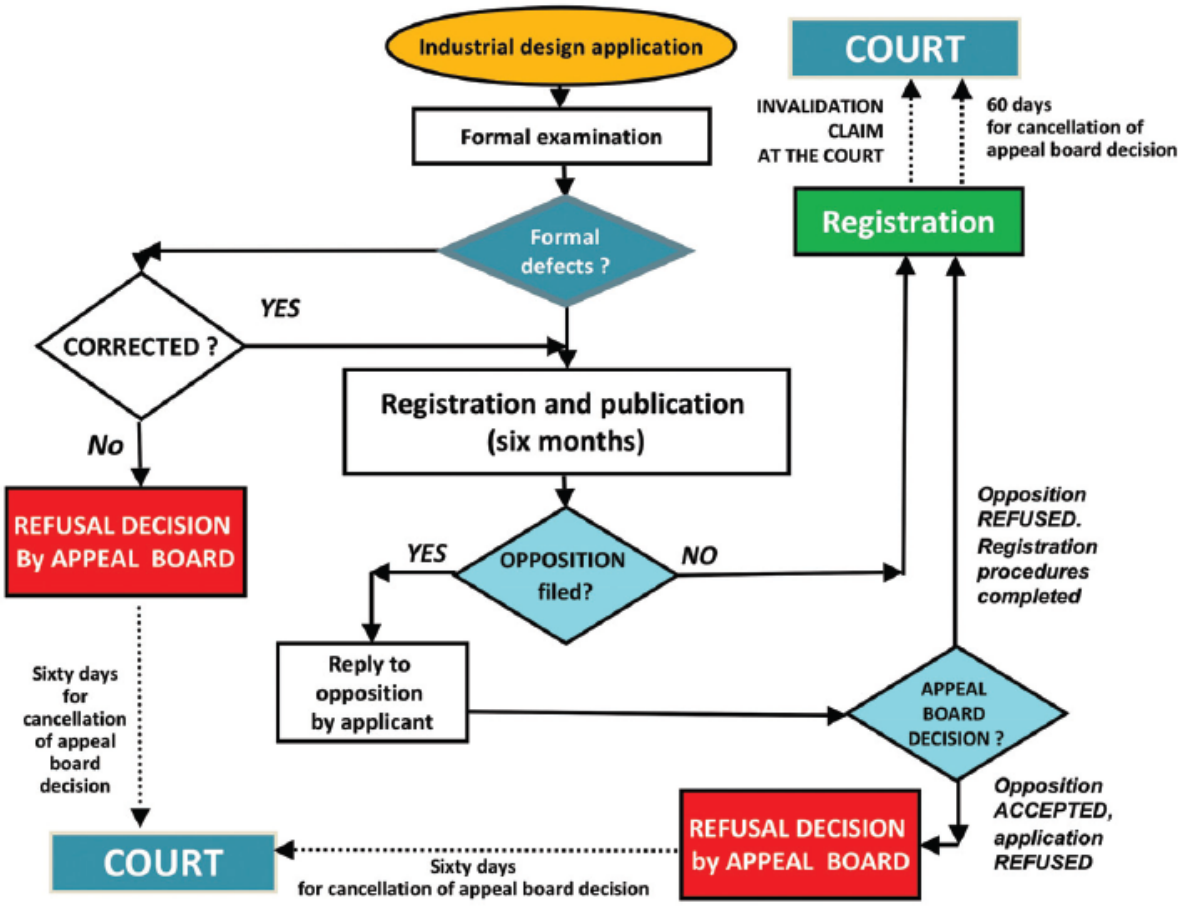


Figure 6: Procedures for industrial design applications in Turkey[9]

Table 13: Statistical Information on Trademarks

Year	Domestic				Foreign							
	Number of Applications	Increase Rate	Number of Designs	Increase Rate	Number of Applications	Increase Rate	Number of Designs	Increase Rate	Total	Increase Date	Total	Increase rate
2006	5527	**12,22%**	28237	**5,69%**	496	**22,47%**	1247	**3,14%**	6023	**13,00%**	29484	**5,58%**
2007	5998	**8,52%**	29109	**3,09%**	546	**10,08%**	1289	**3,37%**	6544	**8,65%**	30398	**3,10%**
2008	6071	**1,22%**	28749	**-1,24%**	507	**-7,14%**	1205	**-6,52%**	6578	**0,52%**	29954	**-1,46%**
2009	5927	**-2,37%**	26312	**-8,48%**	404	**20,32%**	847	**29,71%**	6331	**-3,75%**	27159	**-9,33%**

[9] Ugur G Yalçiner and Irmak Yalçiner, "IP, Past Present and Future" www.managingip.com September 2011

2010	6567	**10,80%**	29467	**11,99%**	405	**0,25%**	974	**14,99%**	6972	**10,12%**	30441	**12,08%**
2011	7524	**14,57%**	35451	**20,31%**	465	**14,81%**	1127	**15,71%**	7989	**14,59%**	36578	**20,16%**
2012	7864	**4,52%**	39890	**12,52%**	559	**20,22%**	1330	**18,01%**	8423	**5,43%**	41220	**12,69%**

Source: Analysis Report on Existing Situation of National Intellectual Property, Turkish Patent Institute (TPI), May 2013

Geographical signs

Geographical signs for all kinds of products such as natural, agricultural, mining and industrial products and handicrafts are protected as either a designation of origin or a geographical indication in Turkey under special legislation. The International Agreements being reserved, with respect to the geographical sign applications for products originating in other countries, the Institute shall apply the provisions of the legislation in its examination if and where the registration requirements in the country of origin conform to the provisions of this article, where inspection is available, where the country of origin affords reciprocal protection to the geographical sign registration applications from Turkey. Statistical information on geographical signs are below in Figure 7.

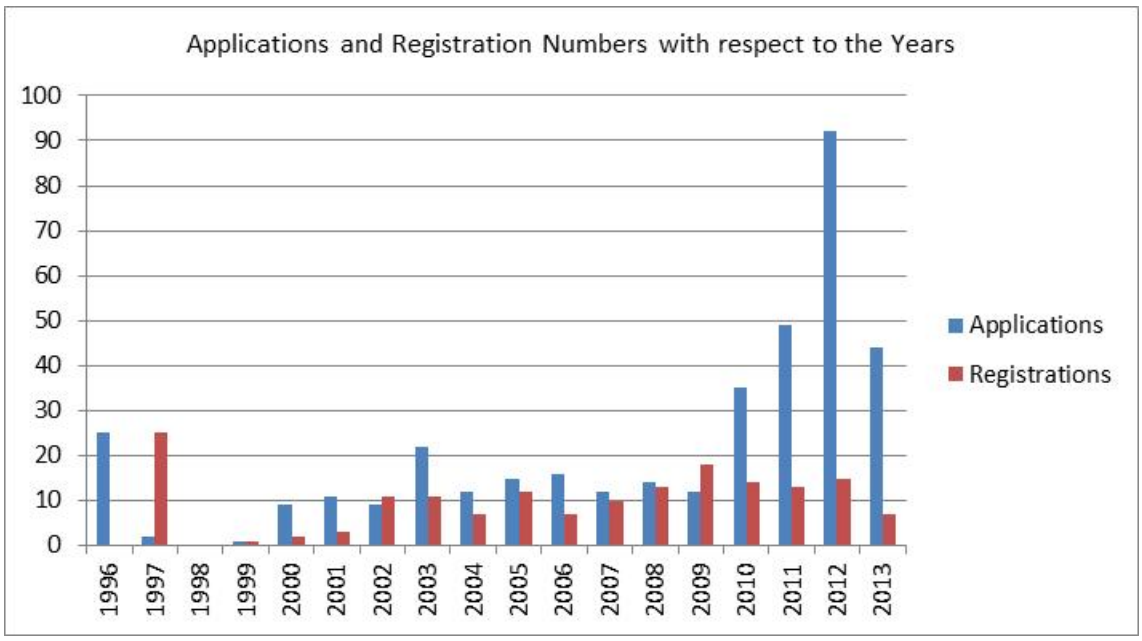
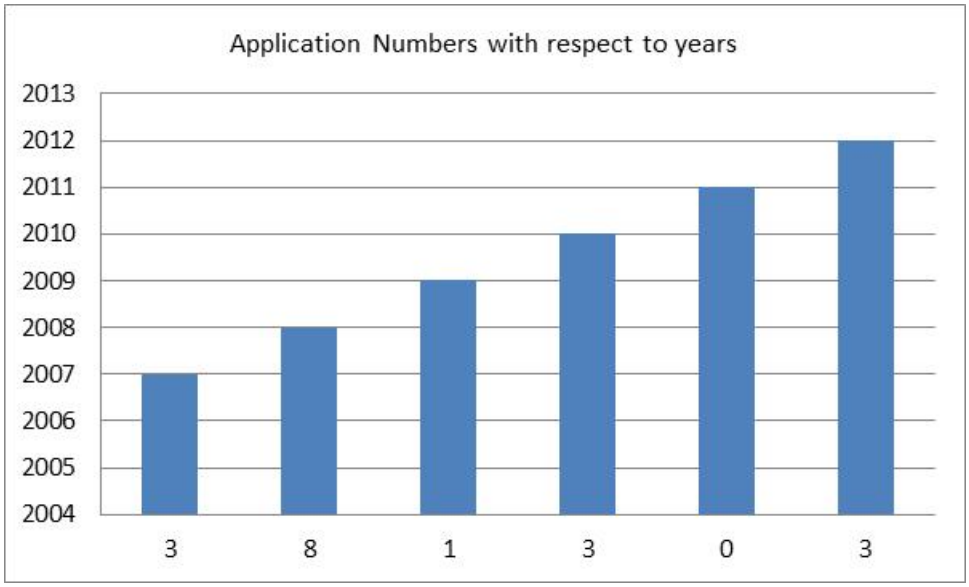


Figure 7: Applications and Registration Numbers with respect to the Years

Source: Analysis Report on Existing Situation of National Intellectual Property, Turkish Patent Institute (TPI), May 2013

Topographies of integrated circuits

Topographies of integrated circuits are protected if they meet the requirement of originality. The protection period starts from the date of launching of the integrated circuit by the applicant or by a third party with his consent (or from the date of filing if the topography has not been launched) and ends at the end of 10 years. The registration procedure is performed without examination and the application is published. No opposition is allowed against the publications. Therefore, invalidations can only be claimed at the court. Registered topographies are not renewed.



Source: Analysis Report on Existing Situation of National Intellectual Property, Turkish Patent Institute (TPI), May 2013

Table 14: Plant Breeders' Rights

The Law of 5042 on Protection of Plant Breeders' of Plant Varieties which is prepared in accordance with the 1991 Agreement text of UPOV, 2100/94/EC and 1768/95/EC directives on plant variety rights of the European Commission entered into force by publishing in the Official Gazette of 15.01.2004 dated and 25547 numbered having passed by the Grand National Assembly.
"The Regulation on the Protection of Breeders' Rights of Plant Varieties" and "The Regulation of Implementation basics on Farmer Exception" entered into force publishing in the Official Gazette of 12.08.2004 dated, in the context of the Law of 5042.
"The Regulation on the Breeders" Rights utilization of the Officials Working in public Intuitions and

Agencies from" entered into force upon publishing in the Official Gazette of 30.04.2005 dated and 25801 numbered.
UPOV Agreement was accepted by the Grand Nation Assembly through Law of 5601 which was published in the Official Gazette of 17.03.2007. Accession of Turkey to UPOV was endorsed by the Cabinet through the Decision of 2007/12433 which is published in the Official Gazette of 28.07.2007
Turkey became 65th member to UPOV on 18.11.2007.

Source: http://www.ttsm.gov.tr/EN/belge/2-43/plant-breederss-rights-and-implementations-in-turkey.html

The services related to protection of plant varieties are carried out by the Ministry of Food, Agriculture and Livestock in Turkey. In this context, for accepting the applications for the purpose of protection of plant varieties and evaluation of these applications accordingly General Directorate of Agricultural Production and Development is responsible; as a technical evaluation institution, whereas, the VRSCC is authorized by the Ministry to carry out FYD tests and other technical procedures.

Application on protection of new plant varieties which is based on the principles of 1991 Decision of UPOV has contributed development of agriculture. Thanks to this application, breeders have a source for breeding new varieties through the incomes from developed varieties, thus growers seek the varieties resistance to pests as well as safe, quality and productive varieties. Development of these properties are encouraged breeder's rights are protected through this system.

The applied plant variety shall have the following general requirements; 1.Novelty, 2. Distinctness, 3.Uniformity, 4. Stability, 5. Naming .The applications are examined by a commission involving the experts from TUGEM, Law Unit and VRSCC. Novelty and name is the basic issues. The application is accepted if no missing is determined by the commission. Each accepted application is given a number and listed in the log. The bulletin involving application is disclosed through http://www.tugem.gov.tr. If no objection is raised in the due time, technical examination is started. The purpose of technical examination is below;

a) confirmation whether the variety belongs to the mentioned botanical classification,

b) determination whether the variety has different characteristics of distinctness, uniformity and stability,

c) if the variety comply with the conditions of a and b, preparation of the variety characterization document.

DUS tests are carried out by the VRSCC. The varieties being applied are compared with similar varieties.

After technical examination institution has sent examination reports to the General Directorate, Registration Committee for Breeders' right has been established involving necessary institutions considering the plant groups. The varieties evaluated in the Registration Committee are kept under protection by the committee decision upon voting. The variety kept under protection is given a name in the context of the related regulation and breeders' right of the variety is registered in the log by this name. The bulletin involving the varieties of which breeder's right is registered is disclosed through http://www.tugem.gov.tr. Protection of duration is 25 years after the registration of the breeders' right. This period is 30 years for trees, vines, and potato.

Statistical information on Plant Varieties

Table 15: Applications according to the Plant Groups

Plant Group	**Applications**	**Protected**
Field Crops	349	193
Vegetable	97	40
Fruit	206	121
Ornamental	75	56
TOTAL	**727**	**410**

***May 2013**

Source: Analysis Report on Existing Situation of Intellectual Property, Turkish Patent Institute

Table 16: Number of Applications according to years

Year	**Applications**	**Protected**
2004	26	0
2005	119	32
2006	55	17
2007	56	21
2008	45	23
2009	71	58
2010	76	72
2011	112	91
2012	122	87
2013*	45	9
TOTAL	**727**	**410**

National (TPI), May

5. Concluding Remarks

In this study, we have examined the national regulatory framework for Intangible Assets. In section 2, we have proposed that intangible assets have a decisive role in the innovation capabilities for companies. As an evolving concept, IA embodies different approaches and certainly needs future studies. However, most of these views are agree on the high knowledge dimension of these assets and IPR is an important part of it. Surely, intangible assets are not limited with intellectual property rights. But still, it provides a useful basis to integrate from intellectual capital to the real value of a company and benefit from innovative efforts. Our take on of IAs emphasize the legally protectable intellectual capital. This has brought the IPR legislation to the core of the examination. We have carried out an existing structure analysis of IPR system in Turkey with its main actors and provided the implementation frame of certain IP rights.

However, there are also criticisms and comments that we have not addressed throughout the study. First of all, we can say that general provisions are mostly arranged according to European provisions and international agreements in Turkey. However, these arrangements were done in terms of law-amending ordinances some parts of these arrangements were cancelled by Supreme Court. In addition, there have been modifications in these arrangements constantly and these changes cause to destroy the systematic in law.

Furthermore, there is no legal arrangement in protecting trade secrets. Another important problem with IPR in Turkey is to protect digital property rights. The deterrent level of copying and diffusing digital assets is quite low, although stealing one's digital property is a harsh penalty according to general provisions but the cases in courts take too long to end.

"More generally, there are complaints of insufficient commitment from authorities. There is a low level of consciousness on the importance of IPR protection among key agents, such as judges, politicians, police and academics. Significant fines and prison sentences are available in the law but rarely applied by courts. Judicial measures against infringers are insufficient, slow and ineffective. There is also a substantial lack of enforcement at the borders."[10]

One of the missing legislation in Turkey is not having special legislation for establishment of patent and trademark attorneys Union, and special provisions for discipline and penalties.

Turkey is aware of the deficiencies in IPR regulations and has amended its IPR legislation in recent years. The amendments are stated in the following:

[10] http://trade.ec.europa.eu/doclib/docs/2006/october/tradoc_130417.pdf

- "Special IPR courts have been established in major cities."
- "Training courses have been launched for judges and police. "
- "Police action against copyright infringements, as well as cooperation with right-holders has improved. " [11]

In order to solve these problems, Turkey should provide deterrent laws and penalties to prevent sales of counterfeit and pirated goods in the market. European Commission Directorate General for Trade suggested that "training of enforcement agents (judges, prosecutors, police, customs, etc.) on the specifics of IPR infringements and rising of their awareness regarding the importance of the issue and its economic, fiscal consequences, as well as the safety, health and security risks" are required to overcome problems in IPR of Turkey. [12]

Turkey has been regulating its IPR legislation by constructing law amending-ordinances related with patents, trademarks, utility models, industrial design, and geographical signs. In addition, Oğuz (2010) states that Turkey has harmonized its IPR legislation with that of EU legislation and as a result and adds that "Through extensive amendments in 1995, 2001 and 2004 in the Law on Copyrights of 1950, Turkey has attempted to meet its commitments to international institutions such as World Trade Organization (e.g. TRIPS) and fulfil its obligations to the EU."[13] Furthermore, Oğuz (2010) states that Turkey started to meet most of IPR regulations since signing the Customs Union Agreement. Turkey is expected to commit appropriate regulations with respect to the EU-Turkey Customs Union Agreement (Council Decision 96/142/EC – Annex 8, Article 2) in order to protect IPR. Although there have been still problems about IPR in Turkey which are discussed previously the improvements are in the progress. Most importantly, the improvements should be done in data protection in line with EU. Since, Intellectual property rights play an indispensable role in the formation, development and protection of innovative capacity as it is stated in YASED report, Turkey should solve problematic issues and "Improvements have been made in the legislation governing Intellectual property rights, particularly following the Customs Union Agreement"[14].

Although Turkey has adopted IPR legislation in 1990s and spent great efforts to inform public (mainly the related people in the industry and trade), at the moment we cannot state that

[11] http://trade.ec.europa.eu/doclib/docs/2006/october/tradoc_130417.pdf

[12] http://trade.ec.europa.eu/doclib/docs/2006/october/tradoc_130417.pdf

[13] Oğuz,Arzu(2010),http://www.zis.gov.rs/upload/documents/pdf_en/pdf/seminari/1sep2010_ipr_education_turkey.pdf

[14] http://www.yased.org.tr/webportal/English/Yayinlar/Documents/YASEDIPRReport-Nov08.pdf

public awareness is in the acceptable level in Turkey. One of the important actions to be taken is to increase public awareness in respecting IPR and obtaining them.

Efficient protection of IP rights is very important for the industry and trade of all countries. Turkey has conducted very serious work and obtained very concrete results in establishing a new and modern IP system starting from 1990s until today. In the near future, amendments to existing IP legislation are needed. Mainly the unexamined patent system, procedures of utility model certificates and enforcement procedures need to be amended, and a new patent and trade mark attorneys' law must be entered into force. Additionally the penal sanctions in enforcement of the IPR rights (mainly patents, industrial designs, geographical signs and topographies of integrated circuits) must be adopted.

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