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Knowledge Sharing Program — — — (Industry & Trade)

with **Iran**

Policy Consultation to Strengthen Iran's Intellectual Property Infrastructure





2017/18
Knowledge Sharing Program
(Industry & Trade) with



Iran

2017/18 Knowledge Sharing Program (Industry & Trade) with Iran

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Iran

2017/18 Knowledge Sharing Program (Industry & Trade) with Irab

Policy Recommendations for Enhancing the Intellectual Property Infrastructure of Iran

- Introduction: Progress of KSP with Iran
- Part I. Status Analysis on the Intellectual Property Infrastructure of Iran
- Part II. Policy Recommendations for Enhancing the Intellectual Property Infrastructure
- Part III. Designing Training Programs for the IP Training Center
- Part IV. Seminars for Strengthening the Abilities of the IP Personnel of Iran



Preface

The Knowledge Sharing Program (KSP) sponsored by the Ministry of Economy and Finance is Korea's representative knowledge-based development cooperation program that supports the economic and social development of our partners and lays the foundation for friendly economic cooperation between our partners and Korea. Since its establishment in 2004, the KSP has provided customized policy consultation based on Korea's development expertise and experience, and reaped the benefits of facilitating our partners' system improvement and linking the program with follow-up economic cooperation.

In response to both local and foreign requests to create a new growth engine in overseas markets by utilizing the KSP strategically not only for policy consultation but also for economic cooperation, the Korea Trade-Investment Promotion Agency (KOTRA) has participated in the KSP since 2014 as its joint general agency. The KOTRA has provided consultation mainly for the promising areas of Korean companies, such as industries, trades, and investments, and helped the KSP to become the foundation of economic cooperation between our partner nations and Korea.

As a general agency of "KSP's policy consultation program for the industry, trade, and investment of 2017/2018," the KOTRA has worked on five KSP tasks, including the Ministry of Justice of Iran program, focusing on the following two aspects: first, in accordance with its original purpose, the KSP has shared with our partners the knowledge Korea has earned during the economic development process with the Ministry of Justice of Iran and provided meaningful policy consultation. We tried our best to facilitate communication between Iran and South Korea and to make Korea's experience applicable to Iran.

Second, in incorporating our companies into the program from the initial planning stage, we enhanced the effectiveness of policy consultation by upgrading the KSP to economic cooperation level, from mere knowledge sharing. In particular, a meeting on intellectual property (IP) protection was held for companies that show great interest in the Iranian market, a friendly market to Korea traditionally, in accordance with the intention of the "policy consultation to strengthen IP infrastructure in Iran." This meeting, we believe, helped resolve the local issues of our companies by discussing IP-related issues with the Ministry of Justice of Iran and developed mutual economic development agenda and public-private partnership.

Research and policy advisory results on the Ministry of Justice of Iran, performed by the Korean Intellectual Property Office, Korea Invention Promotion Association (KIPA), and KISTA, are included in this report, which was sponsored by the Ministry of Economy and Finance and directed by KOTRA.

This year's KSP with the Ministry of Justice of Iran is a continuation of the tasks performed by the Department of Investment and Science & Technology VP (vice president) office in 2017/18. To meet the needs of the Iranian government, the following tasks have been conducted under the primary goal of "policy consultation to boost the Iranian IP infrastructure: 1) current state analysis of the Iranian IP governance infrastructure; 2) policy consultation to strengthen IP infrastructure; 3) curriculum design for the Iranian IP training center; and 4) holding of seminars to boost the capabilities of Iranian IP professionals. Through these tasks, we shared our experience and presented its implications for Iranian policies.

We would like to acknowledge and thank all those who devoted themselves to the knowledge sharing of Korean economic development, especially Dr. Kim Gwan-Yeong (principal Investigator) of KIPA, lawyer Park Yu-Seon of KIPA, group leader Lee Jae-Heon of KISTA, team leader Sim Yeong-Bo, researcher Kim Mi-Mi, professor Bark Tae-Ho of the Graduate School of International Studies, Seoul Nation University, the Ministry of Justice of Iran who actively cooperated directly from Iran, KOTRA Tehran trade officials, and the Korea Embassy in Iran. We would also like to thank all those, including the professional advisory panel, who gave their invaluable advice for this report.

Lastly, this report represents the opinion of the professionals who participated in the program. It does not constitute KOTRA's official opinion.

November 2018

Executive Vice President for Economic Cooperation & Trade Affairs, KOTRA
JONGCHOON KIM



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Introduction: Progress of KSP with Iran

Chapter 1. Program Background

As the former economic sanction against the Islamic Republic of Iran was lifted in January 2016, there has been vigorous discussions on the economic stimulation of Iran. The Republic of Korea held the 11th Korea-Iran Joint Economic Committee 10 years since the last event. The two countries discussed detailed cooperation of six departments, including monetary, finance, duty, tax, industry, trade, investment, SME, and other areas.¹⁾

With abundant natural resources and pride for having a glorious history of the Persian empire, the global society expected significant economic impacts. However, lack of basic infrastructure and difficulties in developing new technologies because of the long-term economic sanction had Iran undergo hardships to invigorate its economy. In addition, the economic cooperation between Iran and other countries after the lifting of the economic sanction is incomplete for building intangible infrastructure that would support tangible asset trades.

Iran established the “20-year Outlook Plan, 2005-2025” as its medium- and long-term goal for economic, social, and cultural developments. Moreover, as part of the plan’s effort, Iran is preparing for the 6th Five-Year Economic, Cultural, and Social Development Plan (2016-2021). With various efforts to improve the lagging intellectual property (IP) of Iran, President Hassan Rouhani emphasized the importance of knowledge-based economy through IP in his UN speech and designated a vice minister for IP in the Ministry of Justice, Iran. To successfully complete the five-year plan, the Iranian government has joined the

1) Nam Seok Choi (2016), The Economic Effects Between Korean-Iranian Economic Cooperation and Korean Companies’ Plan of Action, p. 5, KERI. When the economic cooperation between Korea and Iran expands, USD 84.5 billion in export and 680,000 job positions would be created for 10 years (until 2025). The areas expected to have great economic impact because of the expansion are infrastructure, plant, construction service, petrochemistry, automobile, cultural content, white good, mobile business, etc.

World Trade Organization (WTO), improved the law and institution for IP, invigorated training to achieve more inventions, as well as promoted technical commercialization for its economy to have an IP basis.

At the Korea-Iran high-level meeting (vice-minister of Ministry of Justice-director of KIPO) in November 2016, which was preceded by an invitation from Iran's vice-minister of Ministry of Justice, Iran requested for policy support from Korea on the establishment and operation of the IP Training Center under the Ministry of Justice as well as enhancements on the IP infrastructure. The current IP-related status of Iran is similar to the high growth of Korea in the 1980s. Iran desperately needs to raise awareness for the IP along with improving its infrastructure, therefore it would be very meaningful for Korea to study, analyze, and evaluate the overall infrastructure of Iran's IP based on their advanced cases on the issue and support the establishment of policies for improvement. As more Korean companies are entering the Iranian market in a faster pace, supporting the advancement of the IP infrastructure of Iran by responding to the active cooperation demands from the country is not only necessary for building a strategic partnership between Iran and Korea but also expected to be helpful in protecting the IP of Korean companies in Iran.

The Knowledge Sharing Program (KSP) is used to analyze the current IP infrastructure status of Iran and support policy making for the advancement of IP. With the theme "Policy Recommendations for Enhancing the Intellectual Property Infrastructure of Iran," the KSP will have a detailed study of the ① status analysis on the intellectual property infrastructure of Iran, ② policy recommendations for enhancing the intellectual property infrastructure of Iran, ③ designing training programs and developing training data for the IP Training Center, and ④ intellectual property enhancement training via seminars and invitational workshops.

Chapter 2. Program Progress

1. The Local Fact-Finding and Briefing Session

In November 2016, Iran's Ministry of Justice held a high-level meeting with the Korean Intellectual Property Office (KIPO) and requested support for developing the IP infrastructure advancement plan of Iran. The Korean Ministry of Strategy and Finance selected the 2017/18 Knowledge Sharing Program (KSP) for policy recommendations to Iran on the advancement of IP. The research team for the program proceeded with policy consultation for enhancing the IP infrastructure of Iran.

Before the local briefing session for the consultation, the team implemented the local fact finding to understand the IP demands from the Ministry of Justice and related departments of Iran. The team had interviews with public officials and experts from 11

government departments and related IP organizations, including Customs, Ministry of Culture and Islamic Guidance, Ministry of Agriculture Jihad, Ministry of Industry, Mine and Trade, Ministry of Science, Research and Technology, Iranian Cultural Heritage Organization, Islamic Republic of Iran Broadcasting (IRIB), and University of Tehran. The interviews were to understand the current IP infrastructure status of Iran and on local demands on policy research, education, and training for IP. As the requests from the government departments for IP and their public officials are detailed and specific, the team proposed requests and research direction for the team, established through the briefing session with Iran's Ministry of Justice.

[Table 1] Policy consultation requests from intellectual property-related departments

Department	Discussions and Requests
Ministry of Justice	<ul style="list-style-type: none"> - Introduce revisions for the current laws but the final approval is expected to take a long time because of different opinions from departments - Suggest an independent government department under the office of the president to manage IP-related works
Customs	<ul style="list-style-type: none"> - Request trainings on electronic data delivery system, fake and modified product distinction methods, as well as control and exposure methods for fake and modified products - Promote invitational training of Iranian IP experts to Korea or local and online training by Korean experts
Ministry of Culture and Islamic Guidance	<ul style="list-style-type: none"> - Ask questions about the operation of the Korean Copyright Management Organizations (CMO) and request that the training program of the IP Training Center of Iran to include copyright contents - Expand policy researches on copyrights organized by the Ministry of Culture and Islamic Guidance and cooperation of Iran and Korea on building the IP academy
Ministry of Agriculture Jihad	<ul style="list-style-type: none"> - Ask questions and discuss the status of operating specialty variety protection and progress status of the local ratification on the UPOV-related laws
Ministry of Industry, Mine and Trade	<ul style="list-style-type: none"> - Discuss the international trademark infringement about carpet, pistachio, saffron, and other traditional Iranian products and solutions to the issue - Request policy information and knowledge sharing on profit creation through technical commercialization using patents - Request reflecting patent valuation and IP technical commercialization on the IP Training Center curriculum
Ministry of Science, Research and Technology	<ul style="list-style-type: none"> - Request suitable training contents for the IP Training Center - Technology transfer and R&D - Discuss how the SMEs of Iran may enter the Korean market - Expect building a substantial framework for promoting cooperation on scientific technologies

[Table 1] Continued

Department	Discussions and Requests
University of Tehran, Law School	<ul style="list-style-type: none"> - Understand the current situation on patent application, registration, revocation trial, and other related procedures
Iranian Cultural Heritage Organization	<ul style="list-style-type: none"> - Request technical commercialization policy support recommendations for the globalizing strategy for traditional craftwork brands and their exports - Discuss methods and procedures of preserving and appointing Korean intangible cultural properties as well as instructions to pass the knowledge about traditional cultures to the next generation
IRIB	<ul style="list-style-type: none"> - Proceed with improving people’s awareness of IP through an educational channel - Request for their employees to participate in the strengthening ability programs of the IP Training Center - Discuss Korea’s responses to illegal copyright infringements from neighboring countries
Intellectual Property Judicial Group	<ul style="list-style-type: none"> - Reflect IP protection methods upon the five-year development plan to abide by TRIPS as a first condition to join the WTO - Request for experiences and knowledge sharing from Korea for establishing the IP policy direction of the Iranian government - Question and answer on the Korean government activities about infringement correspondence cases, legal actions, and IP awareness raising - Suggest an academic exchange for enhancing the abilities of IP judiciaries
University of Tehran, Traditional Medicine School	<ul style="list-style-type: none"> - Request knowledge sharing on drug patent application related to traditional medicine and commercialization process after registering medicines - Ask correspondence cases of patent registration of folk remedies outside of Iran without due notice - Request to open an international co-workshop with Korean FTA and NIH experts
IP Forum and IP Expert Meetings of Iran	<ul style="list-style-type: none"> - Ask about the IP awareness levels of Iranians, IP application, and OA response procedures - Point out that researches on preceding technologies are not in place when working with IP expert costs and IP application - Share awareness on possible problems because of the absence of the IP managing department - Discuss needs for cooperation with related departments and the importance of raising IP experts

On July 22, 2017, the team consulted with Iran’s Ministry of Justice in Tehran, Iran, under the theme of the 2017/18 Knowledge Sharing Program with Iran, “Policy Recommendations for Enhancing Intellectual Property Infrastructure of Iran,” with the

training details as follows: ① status analysis on the intellectual property infrastructure of Iran, ② policy recommendations for enhancing intellectual property infrastructure of Iran, ③ designing training programs and developing training data for the IP Training Center, and ④ intellectual property enhancement training via intellectual property seminars and invitational workshops. The briefing session that reported the details of the theme came after. Afterwards, the team submitted the revised version of the Program Concept Paper to the Ministry of Justice to reflect as much demands of the IP-related Iranian government departments and experts as possible. The Ministry of Justice gave the final approval.

2. Intellectual Property Seminar and Korea–Iran IP High–Level Meeting

The research team had the “intellectual property seminar” for Iranian IP public officials and IP-related experts from November 11 to 13, 2017 by the request of Iran’s Ministry of Justice and related departments. The team selected the topic that includes overall common procedures, creation, protection, and utilization of IP. The seminar was constituted with programs that reflected the local situations of Iran.

[Table 2] Local intellectual property seminar program details

Topic	Training Program Details
IP common procedures (basic course)	Understanding the intellectual property system
	Global policy trend of intellectual property
	Trend research on patent technology (oil exploration technology)
	Strategy for a patent on high technology
IP creation	Searching patent information
	Invention and patent
	Investigation methods of preceding technology
	Utilizing patent information on a research plan (making the patent map)
	Foreign patent application strategy
IP protection	Interpreting and preparing a patent specification
	Protection methods for geographical indications
	Protection methods for trademarks
	Control methods for fake goods
IP utilization	Managing copyrights and preventing infringements
	Developing methods for promising technology
	Technology valuation
	Commercializing technology

[Table 3] Local intellectual property seminar schedule

Date	Subjects
November 11	Understanding of intellectual property
	Global intellectual property policy trends
	Patented technology trend analysis for national R&D strategy: oil exploration technology
	Patent strategy of high technology
	Overview of invention education in Korea: law and policy
November 12	Understanding intellectual property
	Patented technology trend analysis for national R&D strategy: oil exploration technology
	Invention and patent
	Prior art search
	Instructions for research notes
November 13	Invention and patent
	Collective management organization
	Technology commercialization
	Protection of traditional products using geographical indications in Iran

Furthermore, the team carried out an invention training pilot training workshop for the gifted students of Iran based on the request of the Iranian government. To raise the understanding of the gifted students on invention and patent, the team proceeded with invention training simulations as well as introduced invention training programs developed by KIPO and Korea Invention Promotion Association (KIPA) for elementary and middle-school students. It also had invention training suitability checks for the local Iranian students and teachers along with the workshop on invention training for Iranian gifted high school students and teachers.

Afterwards, the team had a meeting with the IP experts of Iran and did an additional fact finding that would start discussions on the problems of the Iranian IP-related policies and status of science and technology as well as the needs for technology commercialization.

In addition, a high-level meeting to discuss cooperation between Korea and Iran on IP areas took place during the local IP seminar period (with Korean ambassador Kim Seung-ho sent to Iran, consul Kwak Kyeong-hwan, Officer Lee Ji-hye of the Ministry of Strategy and Finance, KSP researchers, vice minister Mohsen Zadeh of Ministry of Justice, vice minister Abbasi, and director of Erfamanesh IP Training Center). Moreover, the signing of an MOU

to enhance cooperation in Korean and Iranian IP areas as well as ways to improve expert capabilities for enhancing the Iranian IP infrastructure were discussed. Iran's Ministry of Justice delivered strong demands and will to cooperate on the next year's KSP.²⁾

3. Invitational Workshop and Interim Reporting

From April 29 to May 4, 2018, high-level public officials and IP public officials of Iran were invited to Korea for a workshop. The invitational workshop was established to make sure that the public officials from Iran understand Korea's experiences on IP developments, find out the future development methods between the two countries, and establish ways to enforce the related policies in detail by visiting Korea's related organizations, experts' lectures, and meetings.

In April 30, the research team reported the progress of the program while the invited delegation trainees from Iran (IP vice minister Mir Hadi Gharaseyed Romiyani of Ministry of Justice, member of the parliament Allahyar Malekshahi, IP Training Center director Mohammad Hossein Erfanmanesh of Ministry of Justice, director Seyed Mehdi Mirsalehi of Ministry of Industry, Mine and Trade, director Afshin Amini of Customs, and associate professor Keyvan Asghari of Isfahan University of Technology) were present. In addition, the team shared the detailed policy research direction for analyzing Iran's IP infrastructure and enhancing them. An interim reporting session was held, which actively collects feedbacks from the Iranian government.

After the interim reporting session, the delegation from Iran visited KIPO and had a high-level meeting with the commissioner as well as visited and had talks with related organizations such as KIPA and KISTA. When the delegation visited KISTA, they requested to learn various training programs to improve the IP awareness of people, including making the Persian version of the IP Panorama, which was co-developed by KIPO and World Intellectual Property Organization (WIPO) to allow SMEs to utilize their IP. They also suggested to have consistent cooperation between two countries for IP trainings, including an IP expert workshop and technical commercialization of SMEs.

2) Korean ambassador Kim Seung-ho was sent to Iran to open the Korea-Iran IP Seminar in July 2017 and is now requesting to open the 2nd seminar in 2018 through cooperation between the Iranian Ministry of Justice and Korean Ministry of Trade, Industry and Energy. Moreover, the Director of Iran's Industry Property Office Seyed Mehdi Mirsalehi officially documented the request to open next year's Korea-Iran IP Seminar and mentioned that 30 personnel from the Ministry of Industry, Mine and Trade to Korea will be sent to Korea to receive training that would improve their IP capabilities as experts.

4. Final Reporting

On June 24, 2018, the research team conducted a final report on the results of the project and its policy proposals to the policy makers in Tehran, Iran. The final report was attended by representatives of the Ministry of Justice, Customs Office of Iran, the Ministry of Industry Mineral and Trade, as well as the Korean Ambassador to the Islamic Republic of Iran, Mr. Yul Jung Hyun.

The final results report was made on the schedule of the project, the analysis of the status of Iran's intellectual property infrastructure, the results of research themes, and policy recommendations for enhancing Iran's intellectual property infrastructure. Following the final report presentation, the inquiries and answers of senior officials of the Ministry of Justice and Customs Office of Iran, including the director of Ministry of Industry Mineral and Trade, were conducted, which could be effectively utilized in Iran's strengthening of intellectual property infrastructures and policy development.

Chapter 3. Research Scope

1. Research Model of Policy Recommendation for Improving Iran's Intellectual Property Infrastructure

To improve Iran's IP infrastructure, studies that diagnose current infrastructure and isolate certain areas and elements should be enhanced. Infrastructure includes basic substructures for a program as well as internal equipment and facilities and materials that must be built. This is why measuring and diagnosing IP infrastructure in a country are difficult. Therefore, an evaluation that sets the detailed index for diagnosing IP infrastructure is used.³⁾

The infrastructure index is evaluated by adding the global infrastructure index and local infrastructure index.⁴⁾ The global infrastructure index constitutes classification, accession to treaties, human resources, law and regulation compliance, resource sharing, information platforms, and hub systems following the WIPO index.⁵⁾ The local infrastructure index comprises five areas, including Player, Platform, Pipeline, Culture, and Governance, with 22 sub-indexes.⁶⁾

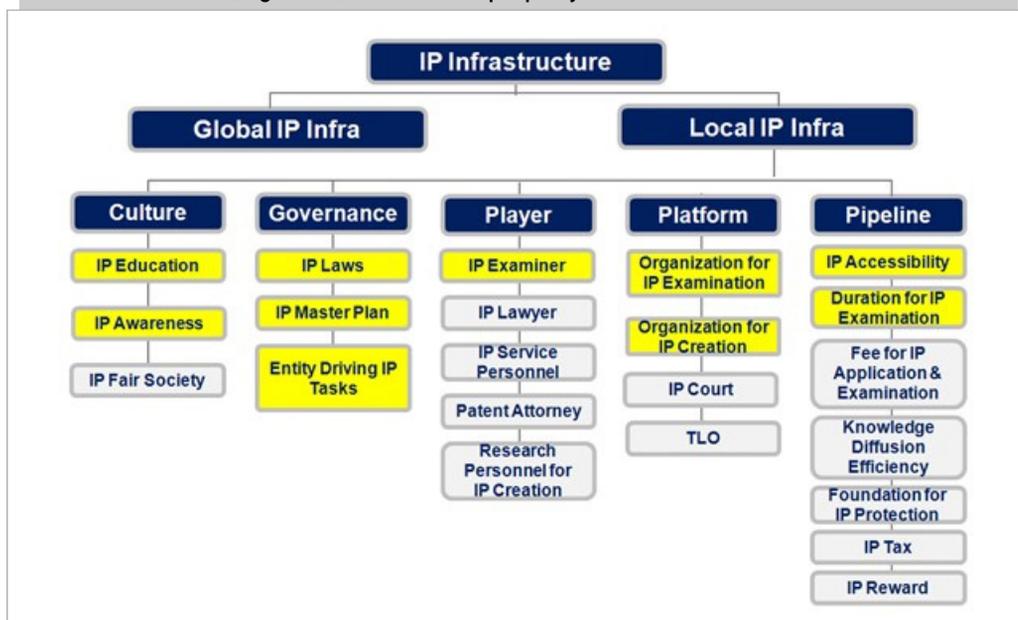
3) Soo Jung Son, STEPI Insight (2014), Global Diagnosis of Intellectual Property Infrastructure and Enhancing Competitiveness, 135, p. 6

4) The same thesis as footnote 3.

5) KIPO (2015), Study on Invigoration of Business Startup and Commercialization Based on Intellectual Property, p. 14.

6) The same thesis as footnote 3, p. 7.

[Figure 1] Intellectual property infrastructure level

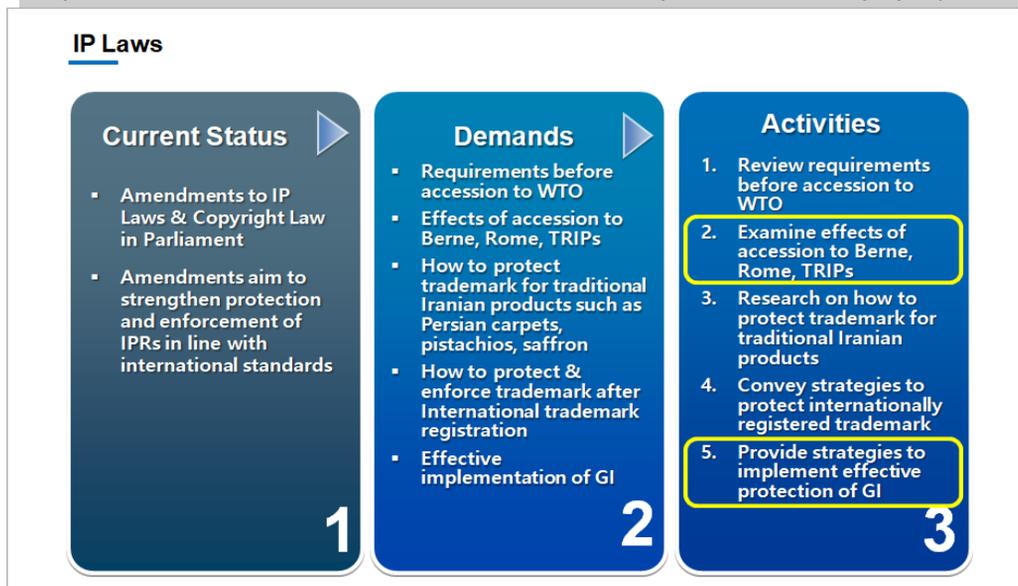


Source: Soo Jung Son, STEPI Insight (2014.2), Global Diagnosis of Intellectual Property Infrastructure and Enhancing Competitiveness

This policy report borrowed the above IP infrastructure model and designed its study model by specifying areas that must be prioritized to enhance the OP infrastructure following the local fact finding, requests from IP public officials of Iran, priorities, and importance considering the economic condition of Iran. The yellow indications on the figure are areas where the team had discovered the status of IP infrastructure through fact finding and document reviews.

The area of IP local infrastructure governance is the basis where a country sets its framework of IP and infrastructure. This comprises IP-related laws, policies, and unified operation body for IP. Currently, in relation to IP laws, Iran is in the progress of joining the WTO. The local fact finding showed that the Iranian public officials had great interests on what kind of legal preparations must be preceded before joining the WTO in terms of IP. Therefore, the research team decided to review advance preparations on IP, which are required for joining the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), one of the WTO departments related to IP.

[Figure 2] Iran's current status, demands, and research scopes on intellectual property laws

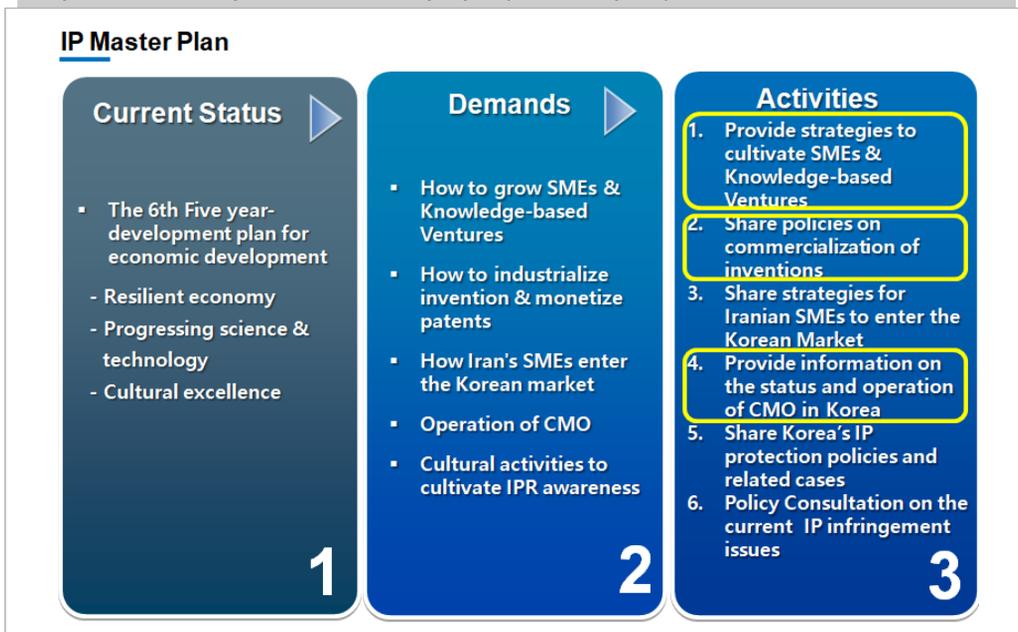


In relation to Iran's IP policies, the public officials of Iran's Ministry of Justice and IP departments requested to proceed with a policy research for raising SMEs and knowledge-based venture companies using IP in the local fact finding. According to the Central Bank of Iran (CBI), SMEs contribute 94% to the industries and 70% to job creation, and 50% of the GDP was contributed by small companies.⁷⁾ Considering the impact of SMEs to Iran's economy, the economic growth of Iran (through raising SMEs based on IP technical commercialization) and vitalizing venture companies based on IP are the most important tasks that Iran faces since the lifting of the economic sanction. The team aims to understand the status of patent technical commercialization in Iran and study the ways to improve the competitiveness of SMEs and venture companies using IP.

As for the current copyright law of Iran in culture and art, the protection of copyrights and prevention of illegal reproduction of works are not only inefficient but also different from international standards. In addition, the Iranians have very low awareness on copyright issues, so online and offline infringements are prevalent. Moreover, as companies that are working on collective administration of copyrights actually manage copyrights when there's no provision of evidence on the establishment and operation of an organization of collective copyright administration, it is difficult to ensure transparency on collective administration and provide fair rewards to copyright holders. With the requests from Iran's Ministry of Justice and Ministry of Culture and Islamic Guidance, the research team aims to study the establishment procedures and legal preparations required for organizations of collective copyright administration.

7) <http://agahgroup.com/smes-in-iran-a-brief-introduction/>, Navid Kalhor, SMEs in Iran: a brief introduction,

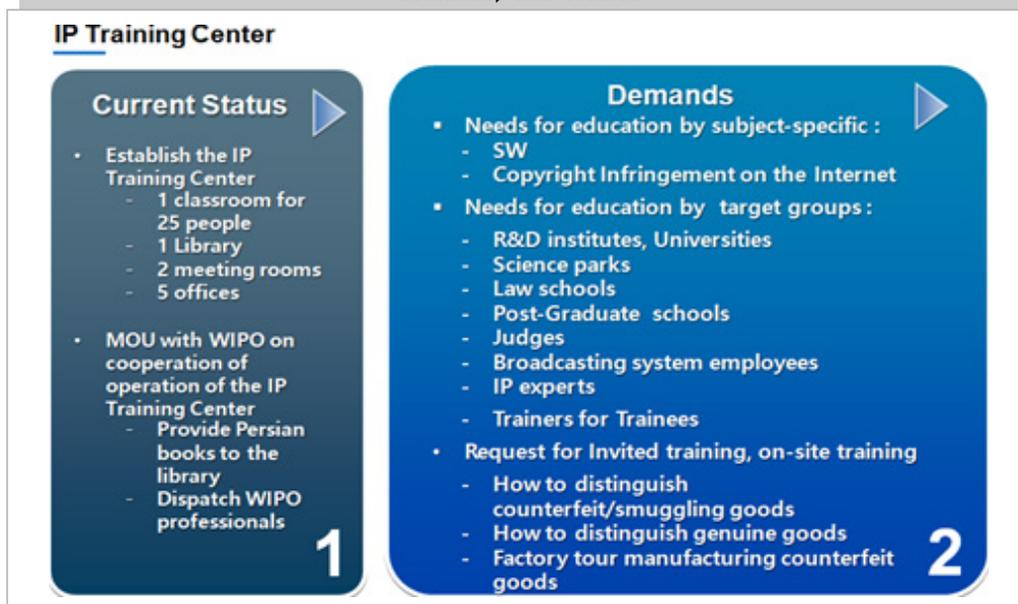
[Figure 3] The scope of intellectual property-related policy status, demands, and studies



IP culture consists of IP training, awareness raising, and index on IP fair society. Notably, a training for IP public officials, who make and enforce national policy decisions, is one of the most important elements for raising awareness on national IP.

In 2017, Iran's Ministry of Justice established the IP Training Center to train IP public officials on IP issues. The center currently has all the necessary buildings and facilities for training, but it requires detailed training programs and curriculums. Iran's Ministry of Justice requested for standard curriculums of basic IP training based on Korea's IP training model and receiving trainings on various topics in accordance to their different needs on different departments and institutions. The team will develop curriculums based on Korea's "intellectual property standard training course" that contains IP curriculum completion courses designed for the systematic spread of IP trainings by KIPO and KIPA and provide them for the IP Training Center of Iran. In addition, the team will provide trainings on various topics that the Iranian public officials requested in the IP seminar.

[Figure 4] The scope of intellectual property training-related policy status, demands, and studies



The research team developed a study topic for policy research and training program for awareness raising on IP by understanding the current infrastructure status with governance and IP culture at the center as well as collecting demands and requests from Iran's Ministry of Justice and related departments. The team focused on IP governance and culture among Iran's IP local infrastructure and developed a research model that concentrates on trainings to improve awareness of public officials and people of Iran through IP trainings. The team finalized the scope of this policy research through discussions with the Ministry of Justice.

Chapter 4. Expected Effects

By using this study to share and deliver Korea's successful cases of IP policy to Iran, the team expects that the study will contribute to the improvement of Iran's IP infrastructure and IP public official abilities. Moreover, the team expects Korean companies to support the stable exercising of IP in the Iranian market through this research, so Korean companies can enter the Iranian market as a result. Furthermore, the team expects that the program would become a stepping stone for Korean IP models to be spread across the Middle East. Especially for the support program for the IP Training Center of Iran, it would go beyond simple training for the Iranian IP public officials and become training methods to help raise IP experts and IP awareness for the nation.

The IP infrastructure improvement of Iran, through the policy recommendations, will add momentum to the Iranian government on their policy executions and draw more foreign capitals as well as foreign direct investments to Iran. Finally, technical commercialization, startup environment improvement, awareness raising for IP protection issues, improving national transparency through a knowledge-based economy, enhancement of cooperation between industries and academic areas, and other goals mentioned by the president of Iran at his UN speech are expected to be advanced even further through this program and next year's.

2017/18 Knowledge Sharing Program
(Industry & Trade) with Iran

Part I

Status Analysis on the Intellectual Property Infrastructure of Iran

- Chapter 1. Application of Intellectual Properties and Registration Status in Iran
- Chapter 2. The Current Status of the Intellectual Property Law of Iran
- Chapter 3. The Current Status of the Intellectual Property Unified Operation of Iran
- Chapter 4. The Current Status of the Intellectual Property Search System of Iran
- Chapter 5. The Current Status of the Policies for the Commercialization of SME Patent Technologies of Iran

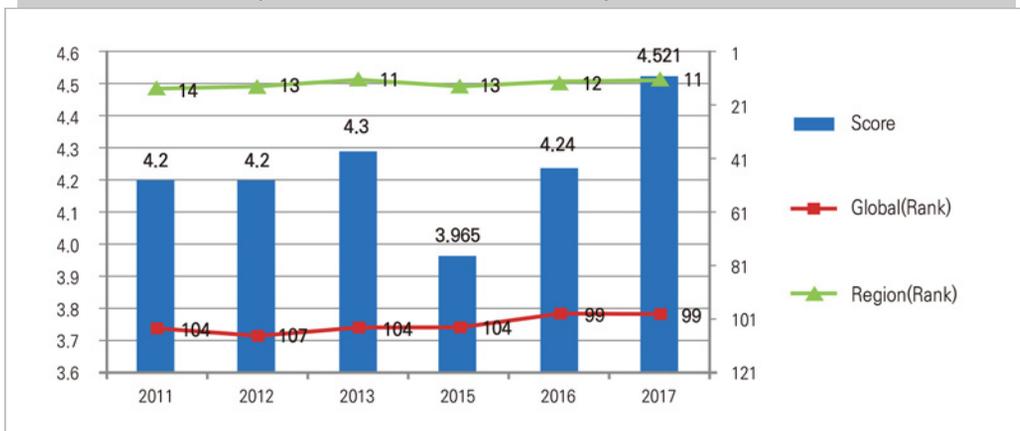
Status Analysis on the Intellectual Property Infrastructure of Iran

Chapter 1. Application of Intellectual Properties and Registration Status in Iran

1. The Current Intellectual Property Status of Iran

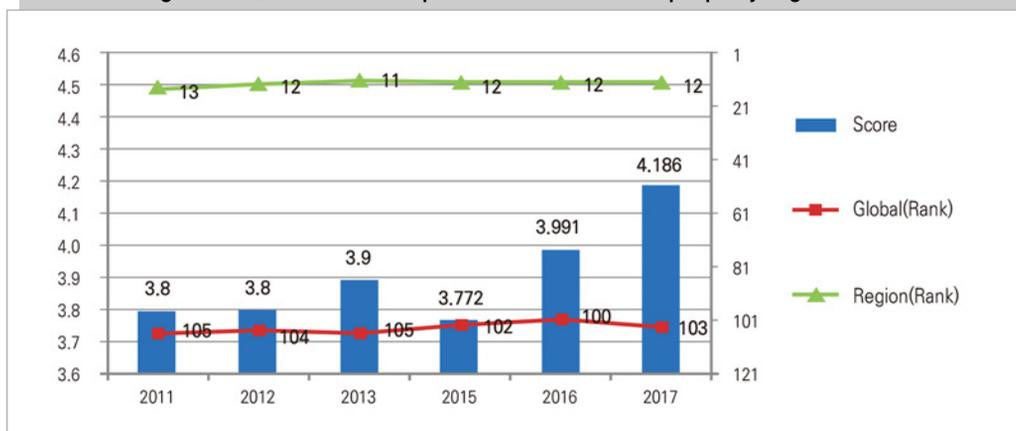
A look at Iran’s property protection levels through the International Property Rights Index (IPRI) shows that as of 2017, they have 4.52 points, ranking in 11th place for the Middle East and North Africa as well as 99th place in the world. Iran’s index has increased by 0.26 points from last year but is different by 5.5 points to the average global point of 2017. The IP index of Iran has increased by 0.20 points from 3.99 of 2016, to 4.19 of 2017. Especially, the patent protection index is 4.73 points, which is higher than other IP index numbers. However, Iran’s IPRI was at the 103rd place in 2017 and 12th place in the region, which is very low.

[Figure 1-1] Iran’s overall development of the IPRI



Source: International Property Rights Index (IPRI)

[Figure 1-2] Iran's development of intellectual property rights index



Source: International Property Rights Index

[Table 1-1] Iran's IPRI survey results

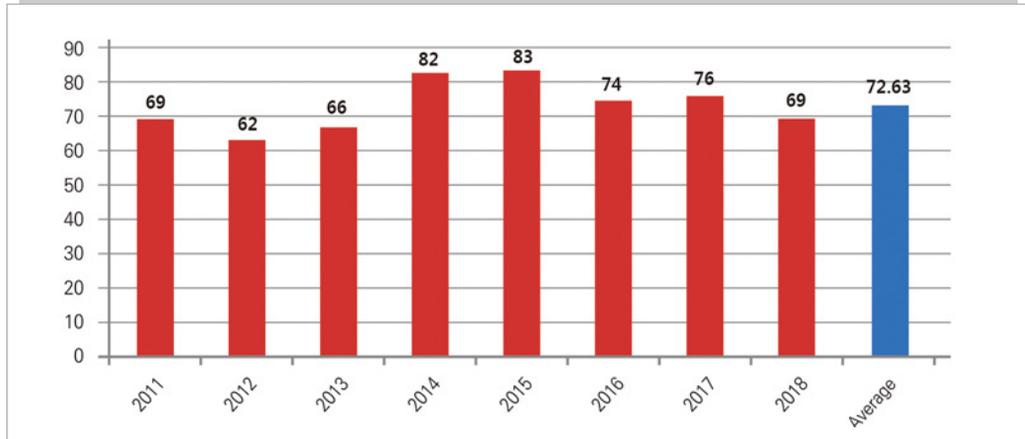
Index	2011	2012	2013	2015	2016	2017
IPRI	4.2	4.2	4.3	3.965	4.24	4.521
LP	3.5	3.4	3.5	3.278	3.582	3.608
PPR	5.4	5.5	5.6	4.845	5.149	5.77
IPR	3.8	3.8	3.9	3.772	3.991	4.186

Source: International Property Rights Index

According to the Global Competitiveness Report 2017-2018 announced by the World Economic Forum, the world competitiveness index of Iran was at 69 out of 137 countries. The average economic competitiveness of Iran from 2011 to 2018 was at the 72.63th place on an average. The year 2015 was when Iran got its lowest competitiveness rank at 83rd place, whereas its highest competitiveness rating was in 2012 at the 62nd place.⁸⁾

8) <http://reports.weforum.org/global-competitiveness-index-2017-2018/>, The Global Competitiveness Report 2017-2018

[Figure 1-3] Iran's development of global competitiveness



Source: Global Competitiveness Report 2017-2018

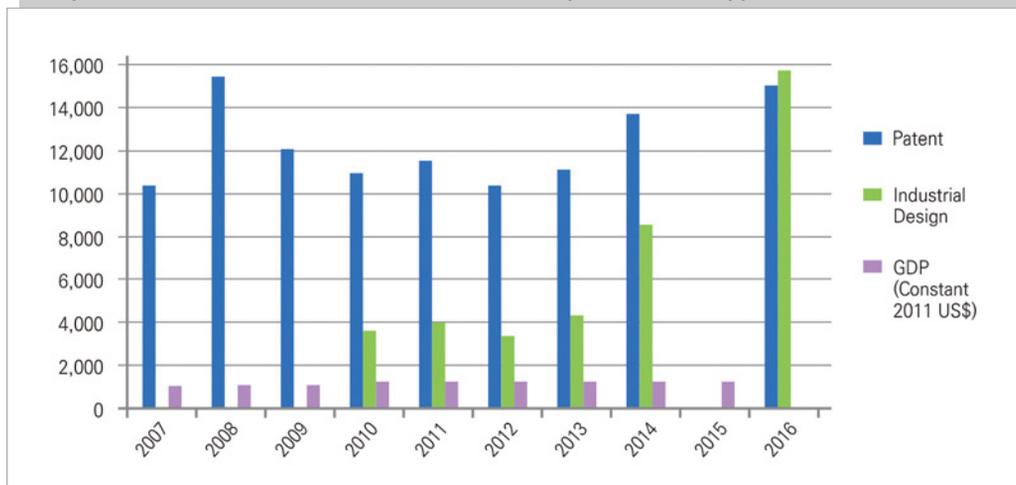
The IP protection index is especially low that Iran ranked at 107th place out of 137 nations.

[Figure 1-4] Iran's IP rights protection rank among national competitiveness

1st pillar: Institutions		12th pillar: Innovation	
1.01 Property rights	100	12.01 Capacity for innovation	88 3.9
1.02 Intellectual property protection	107	12.02 Quality of scientific research institutions	55 4.0
1.03 Diversion of public funds	68	12.03 Company spending on R&D	66 3.3
1.04 Public trust in politicians	49	12.04 University-industry collaboration in R&D	94 3.2
1.05 Irregular payments and bribes	83	12.05 Gov't procurement of advanced technology products	50 3.5
1.06 Judicial independence	81	12.06 Availability of scientists and engineers	39 4.5
1.07 Favoritism in decisions of government officials	46	12.07 PCT patents applications/trillion pop.	84 0.3
1.08 Efficiency of government spending	45		
1.09 Burden of government regulation	83		
1.10 Efficiency of legal framework in settling disputes	76		
1.11 Efficiency of legal framework in challenging regulations	81		
1.12 Transparency of government policymaking	105		
1.13 Business costs of terrorism	96		
1.14 Business costs of crime and violence	74		
1.15 Organized crime	91		
1.16 Reliability of police services	71		
1.17 Ethical behavior of firms	78		
1.18 Strength of auditing and reporting standards	118		
1.19 Efficacy of corporate boards	125		
1.20 Protection of minority shareholders' interests	110		
1.21 Strength of investor protection 0-10 (best)	126		

A correlation between Iran's IP application rate and national economic development shows that patent technology developments vitalize a market competition, therefore they support national productivities of value added and give positive influences to the national economic development. However, Iran shows not much difference in the GDP growth despite the growing number of patent application. This makes the suggestion of the patent system difficult, and technical innovation and national economic development are correlated.

[Figure 1-5] Correlation between Iran's development of IP application rate and GDP



Source: WIPO Statistical Country Profiles: Iran

The graph shows that the number of industrial design application has been increasing rapidly since 2014. In 2016, the number of industrial design application was higher than the number of patent application.

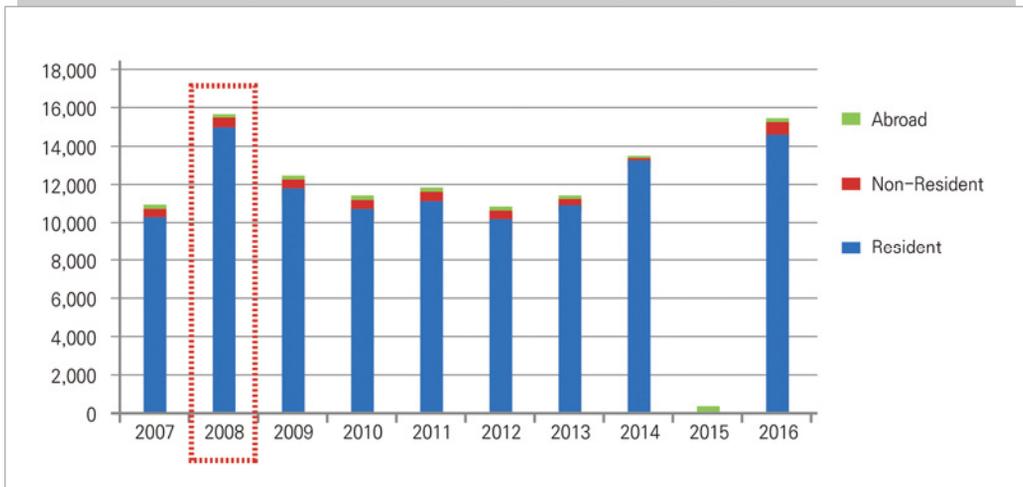
2. Patent Application and Registration Status

It is very difficult to understand and analyze the development of the current status of industrial design application and registration in number. Because of the local conditions of Iran, which has been affected by the economic sanction and long-time isolation from the global market, finding the exact statistics on the current status of industrial design application and registration is no easy task. According to the patent application and registration statistics of Iran analyzed by the WIPO, the patent application of Iran was the highest in 2008 but it decreased significantly afterwards and started to increase again from 2012. However, the application rate of 2016 is still low compared to 2008.

Iran's patent application rapidly decreased between 2008 and 2012. The residents' patent application rate had especially declined in a fast pace from 2007 to 2012. This rate had decreased by 40% in 2012 compared to 2008. The patent application and registration by non-residents were also very low and showed a decreasing - the number was decreased to 2% in 2011 and 2012 from 8.7% in 2010. These are likely because of the prohibition of trades and business transactions by the economic sanction on Iran. The WIPO statistics show that the average patent application rates of non-residents to 130 global patent offices are around 35.5% to 40.1%.

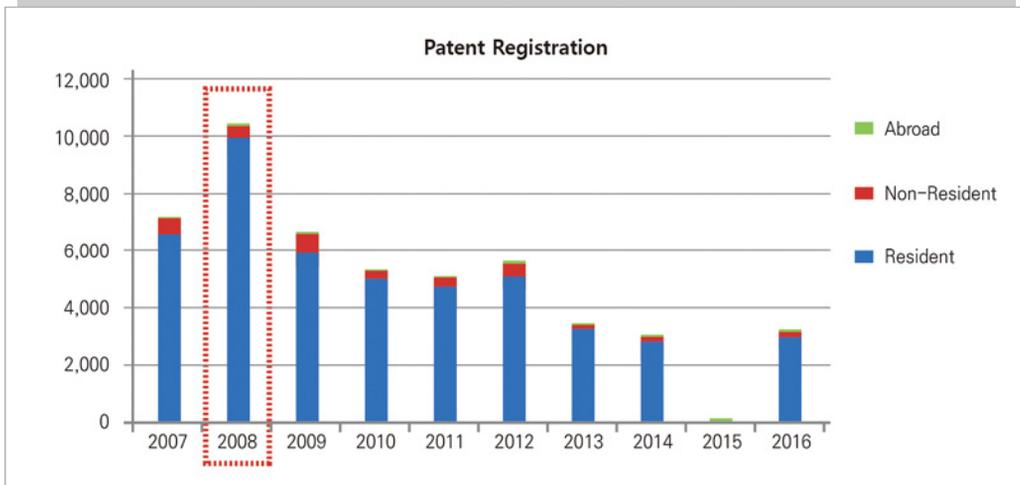
The legal reason why the application and registration were decreased is because substantive examinations on patents became mandatory following the implementation of the Patents, Industrial Designs and Trademarks Registration Act of the Islamic Republic of Iran (the IP law of Iran) in 2008. Following the revised policies, all patent application must now receive not only formality examinations but also substantive examinations. The applicants must choose an examination body and pay examination fees for substantive examinations, which are burdensome in terms of costs. This is most likely the reason why the numbers in application and registration decreased significantly.

[Figure 1-6] Iran's development of patent application



Source: WIPO Statistical Country Profiles: Iran

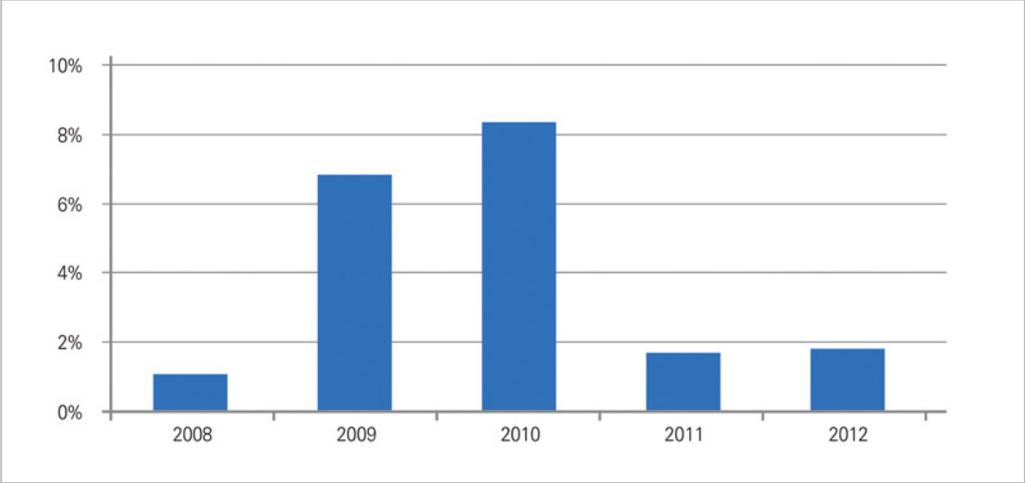
[Figure 1-7] Iran's development of patent registration



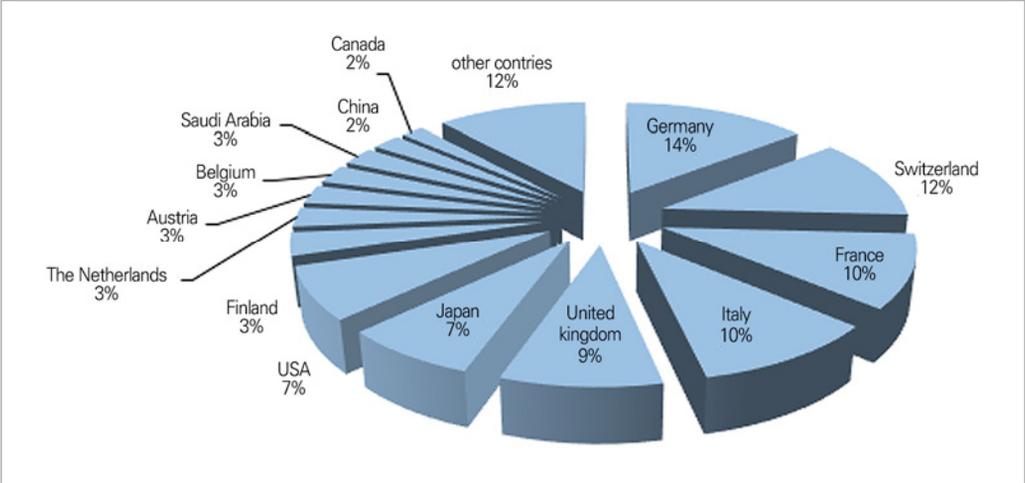
Source: WIPO Statistical Country Profiles: Iran

The spread of non-resident patent applicants by nationality from 2008 to 2012 shows major European nations such as Germany, Switzerland, France, and Italy actively applying for patent applications. They are the same as the former top 10 countries with the highest export amount to Iran.

[Figure 1-8] Non-residents' development on patent registration in Iran (2008-2012)

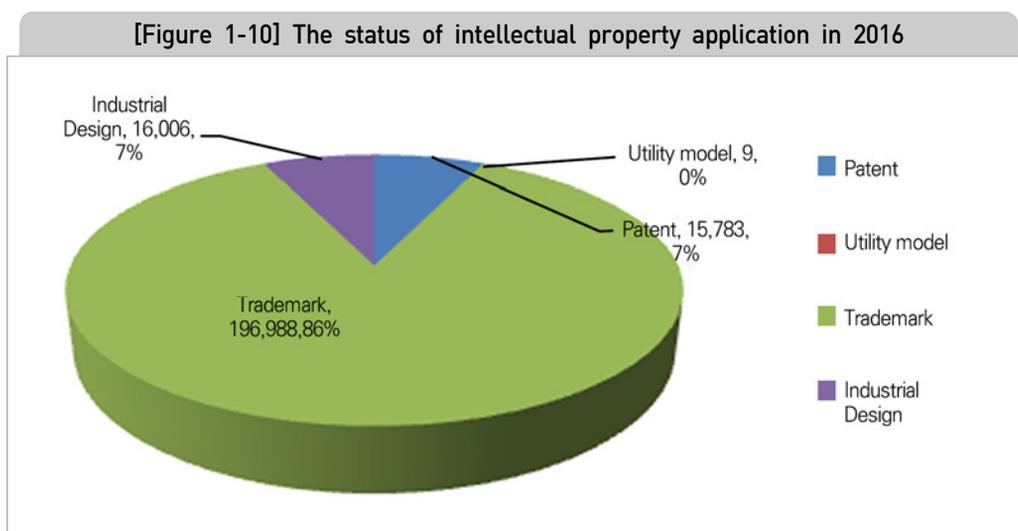


[Figure 1-9] Non-residents' patent application rates by nationality (2008-2012)



3. Trademark Application and Registration Status

Based on the trademark application and registration numbers reported to the WIPO in 2016, the analysis on Iran's IP application status shows that trademarks take 86% of the total IP application. Meanwhile, patent and industrial design take 7% of the application.



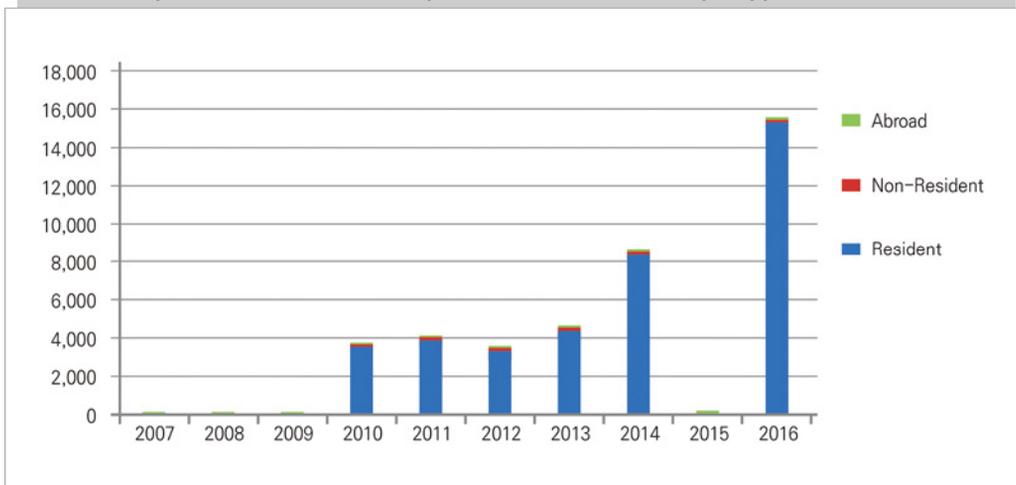
Source: WIPO Statistical Country Profiles: Iran

4. The Status of Industrial Design Application and Registration

Iran's industrial design is the fastest growing in the world and recorded a 34.8% growth rate in 2016. According to the WIPO, the total global industrial design applications were 963,100, which grew by 10.4. The reason for such fast growth in the global industrial design is due to the influence of China, a country that is growing rapidly. The Chinese Patent Office had 650,344 patent applications in 2016. The European Union had 104,522, Korea had 69,120, Germany had 56,188, and Turkey had 46,305 applications. However, Iran still ranks as the fastest growing in the world when it comes to design, and the number of industrial design applications is still rising.⁹⁾

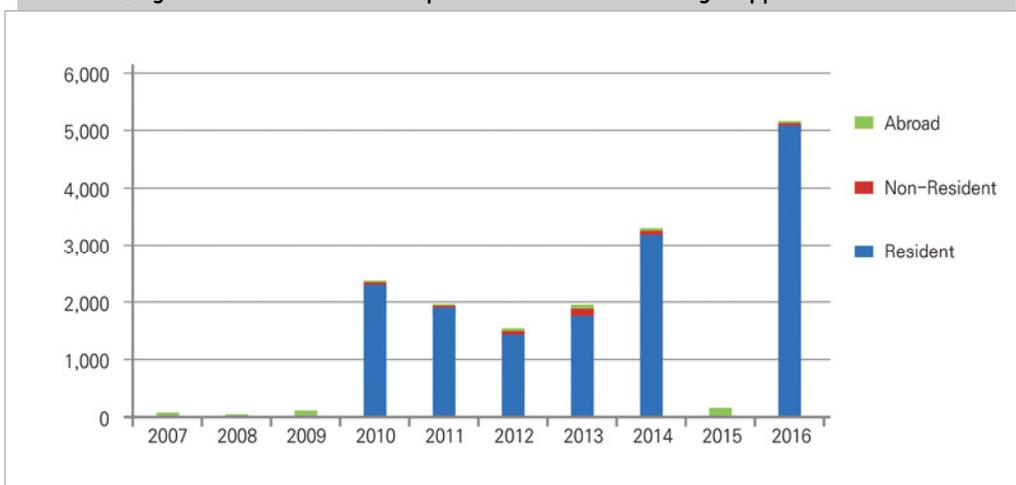
9) Finance Tribune, WIPO: Fastest Growth in Iran's Industrial Designs, <https://financialtribune.com/articles/economy-domestic-economy/77490/wipo-fastest-growth-in-iran-s-industrial-designs>

[Figure 1-11] Iran's development of industrial design application rate



Source: WIPO Statistical Country Profiles: Iran

[Figure 1-12] Iran's development of industrial design application rate



Source: WIPO Statistical Country Profiles: Iran

Chapter 2. The Current Status of the Intellectual Property Law of Iran

1. Overview of the Patents, Industrial Designs, and Trademarks Registration Act of the Islamic Republic of Iran

The first industrial property law of Iran was established in 1928, but it was limited to trademark protections only. In 1931, the first industrial property law, which includes comprehensive regulations on patents and trademarks as well as enforcement regulations, was established.¹⁰⁾ As Iran joined the Paris Convention for the Protection of Industrial Property in 1959 to protect industrial properties, they established the industrial property law that contains a wide range of regulations on patent, trademark, design, utility model service mark, company name, geographical indication, and prevention of unfair competition.¹¹⁾ In 2005, the law to protect geographical indications was established, and as it was enforced in 2006, all geographical indications of Iran for local territories, regions, or areas that are origins of products were protected in terms of quality, reputation, and characteristics, up to the source.¹²⁾

As the industrial property law that was established in 1931 was considered ineligible for technological advancements and lagging behind the trend, the old law was revoked and the new industrial property law was established in 2008, which reorganized patent and trademark registration institutions. The enforcement decree of the new law was enacted in 2009. The 2008 industrial property law has a characteristic of stipulating substantive examinations by changing the patent and trademark registration from previous reporting to preliminary examination system.¹³⁾

[Table 1-2] Iran's establishment status on intellectual property laws¹⁴⁾

Title	Article	Enforced
Patents, Industrial Designs and Trademarks Registration Act	Article 66	2008
Act for Protection of Geographical Indications	Article 16	2005
Electronic Commerce Law	Article 81	2003
Act of Plant Varieties Registration, Control and Certification of Seeds and Seedlings	Article 14	2003
Act on the Protection of Rights of Computer Software	Article 17	2000
Translation and Reproduction of Books, Periodical, and Phonograms Act	Article 12	1973
Act for Protection of Authors, Composers, and Artists Rights	Article 33	1970

10) 日本貿易振興機構(JETRO), イランにおける模倣品対策の制度及び運用状況に関する調査, 2017, p.17.

11) Ibid.

12) Supra note 10 at 18.

13) Ibid.

Iran's IP law regulates patent, trademark, and other items separately in different laws, but the industrial property law regulates patent, industrial design, and trademark comprehensively. The industrial property law has articles 1 to 19 on patent, articles 20 to 29 on industrial design, and articles 30 to 47 on trademark. Article 48 to 65 are on general industrial property issues.¹⁵⁾ For some industrial property on the Internet, an electronic commercial law is applied.¹⁶⁾

The industrial property law of Iran does not have a regulation on utility models. However, Iran joined the Paris Convention for the Protection of Industrial Property, and as the convention defines that utility models are to be included within the industrial properties, all utility models are considered patented and copyrights can be applied through registration to the Industrial Property Office.¹⁷⁾

A. The Patent Act Overview

(1) Patent Requirement

The Patents, Industrial Designs, and Trademarks Registration Act of the Islamic Republic of Iran states that “An invention shall be patentable if it includes a new innovation and is industrially applicable.” It defines “new innovation” and “industrially applicable” as conditions for patents. The law defines “innovation” as something that is not obvious by the conventional technologies and not self-evident to those who possess conventional knowledge on the field. “Industrially applicable” is an invention that can be comprised and used in certain industrial areas. “Industry” includes handcraft, as well as agriculture, fishery, service, and others.¹⁸⁾ The standard of “new innovation” follows a “person skilled in the relevant field of technology” just like the Korean Patent Act. Because innovation requires no predictability and no obviousness, it is not so different from the definition of the Korean Patent Act, stating that it is an “inventive step.”¹⁹⁾

Regarding novelty, paragraph e) of article 4 of the industrial property law of Iran states that everything disclosed to the public, anywhere in the world, through written or oral

14) <http://www.wipo.int/wipolex/en/profile.jsp?code=IR>

15) Industrial property law of Iran (Patents, Industrial Designs and Trademarks Registration Act (2008)).

16) Behrooz Akhlaghi, An Introduction to the Iranian Intellectual Property Law, atrip.org/wp-content/uploads/2016/06/Akhlagi-Iranian-IPR.doc

17) Paragraph 2 of article 1 of the Paris Convention for the Protection of Industrial Property states that “The protection of industrial property has, as its object patents, utility models, industrial designs, trademarks, service marks, trade names, indications of source or appellations of origin, and the repression of unfair competition.”

18) Article 2 of the Patents, Industrial Designs and Trademarks Registration Act of the Islamic Republic of Iran

19) Article 29 of the Korean Patent Act states that “Notwithstanding paragraph (1), where an invention could easily be made prior to the filing of the patent application by a person having ordinary skill in the art to which the invention pertains, on the basis of an invention referred to in any subparagraph of paragraph (1), no patent shall be granted for such invention.”

publication, by practical use or in any other way, prior to the filing or, where appropriate, the priority date, of the application claiming the invention, shall be excluded from the scope of the protection of a patent. However, disclosure to the public of the invention shall not prevent granting of the patent, if it has occurred within six months before the filing date or, where appropriate, before priority date of the application.

The law defines the location standards of novelty as anywhere in the world. This includes written or oral publications. In addition, there are no limits to the ways of representation.²⁰⁾ The Korean Patent Act sets one year for the exception of public disclosure, but Iran sets it at six months.²¹⁾ The intellectual property law of Iran does not define electric telecommunication lines for standards of novelty criteria, but the loss of novelty through electric telecommunication lines (the Internet, etc.) is included according to the purpose of the law and legal interpretations of “publications.” The public use is also included.²²⁾

(2) Rights of a Patent Owner

If the patent has been granted for a product, the owner shall have a right to exploit inventions by persons other than the owner in terms of manufacture, exporting, and importing, as well as stocking such product for the purpose of offering for discount, selling, or using.²³⁾ If the patent has been granted in respect of a process, the owner shall have a right to use the process and exploit products made by the process.²⁴⁾

The owner can transfer an ownership of invention, the whole or part of the right, for use of the product by others. A bill of transfer must be prepared and registered to the Industrial Property Office for the transfer to take effect.²⁵⁾ So, any act of copying inventions without permission from the owners and producing and selling counterfeit goods are in violation of the patent rights whether they were intended or not. The expiration of the period of existence for a patent is 20 years from its application date; same goes with the Korean Patent Act.²⁶⁾

(3) Patent Application, Registration, and Examination

Article 13, the Patents, Industrial Designs and Trademarks Registration Act of the Islamic Republic of Iran states that the Industrial Property Office shall examine whether the

20) KIPO, KIPA (2017), International Intellectual Property Guidebook (Iran), p. 50.

21) Article 30, the Korean Patent Act

22) International Intellectual Property Guidebook (Iran), p. 49.

23) Article 15, the Patents, Industrial Designs and Trademarks Registration Act of the Islamic Republic of Iran

24) See 23.

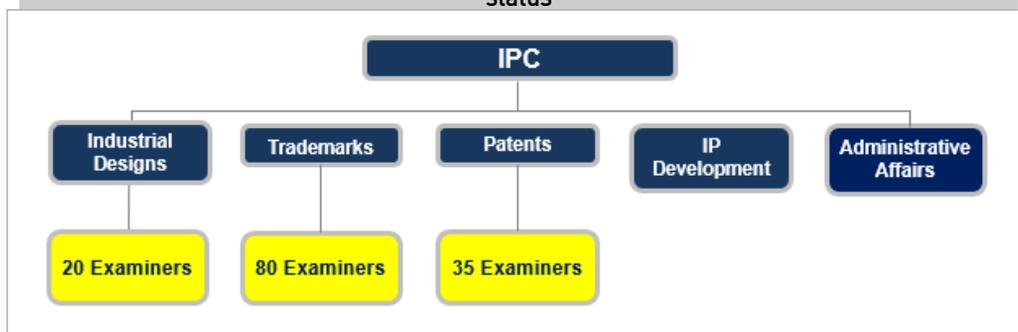
25) Supra note 16.

26) Article 16, the Patents, Industrial Designs and Trademarks Registration Act of the Islamic Republic of Iran

application complies with the requirements of this Act and the Regulations pertaining thereto, and if it finds that the said conditions and requirements are duly fulfilled, it shall proceed to grant the patent. Article 2 of the same law states that an invention shall be patentable if it is novelty, obvious, and industrially applicable. Therefore, substantive examinations by the Industrial Property Office for an application is obligatory. The applicant must hand in the application form and other documents in Persian to the Industrial Property Office and the examiner of the office must examine whether the documents meet the formality.²⁷⁾ Nevertheless, substantive examinations on a patent technology must be proceeded with examiners with expertise on the technology and must carry out prior art searches as well as collect the technology-related documents to verify the assertion of applicant. If no system for substantive examinations is established, it is difficult for the Industrial Property Office to engage substantive examinations on patents.

Currently, there are around 135 examiners, including 35 examiners for patent, 80 examiners for trademark, and 20 examiners for industrial design. Considering the distinct characteristics of patent technologies, around 35 patent examiners working on substantive examinations have difficulties.

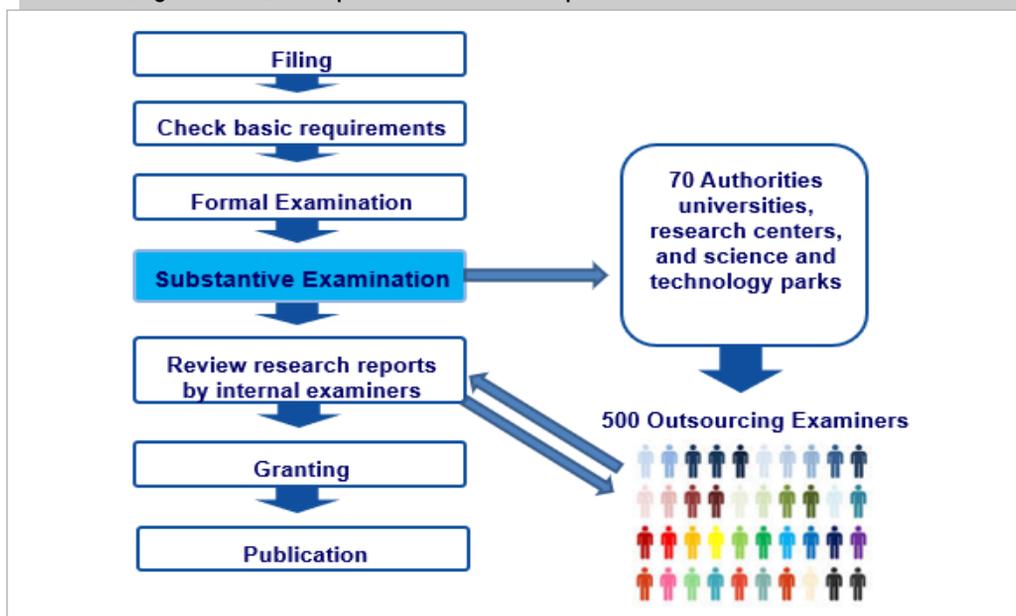
[Figure 1-13] The Iran Intellectual Property Office organization chart and examiners' status



Patent applications in technological areas are practically sent to science parks or research centers depending on the types of technology and go through substantive examinations on the applications by around 500 experts as sort of external examiners. The Intellectual Property Office only works on managing the examinations, including providing reasons when an examination declines an application or requesting a reexamination.

27) Article 6, the Patents, Industrial Designs and Trademarks Registration Act of the Islamic Republic of Iran states that “The application for registration of a patent which is submitted to the Industrial Property Office shall be made in Farsi, shall specify the subject for which protection is sought, and shall be duly signed and dated.”

[Figure 1-14] The procedure of Iran's patent substantive examination



B. The Trademarks Law Overview

The Patents, Industrial Designs and Trademarks Registration Act of the Islamic Republic of Iran defines a trademark as “any visible sign capable of distinguishing the goods or services of legal entities or of natural persons.”²⁸⁾ According to the act, a trademark is only limited to visible signs, therefore invisible elements such as sound or smell cannot be considered as trademarks. This is different from the Korean Trademark Act which expands the definition of “trademark” as “any sign, letter, figure, three-dimensional shape, or the combination thereof or the combination of them and colors; any color that is not combined with others, the combination of colors, any hologram, movement or other item that can be visually recognized; any sound, odor, or others expressed realistically with a sign, letter, figure, or by any other visual means among sounds, odors, and others that cannot be recognized visually.”²⁹⁾ According to Iran’s IP law, a trademark includes a service mark. Before the revision in 2008, trademarks were only limited to products or agricultural products, but they were extensively interpreted to include service marks following the classification of goods in the enforcement decree of the trademark law. In the revised version, trademarks include service marks.

The IP law of Iran includes trademarks within the trademark act by stating that “Mark means any visible sign capable of distinguishing the goods or services of legal entities or

28) Article 30, the Patents, Industrial Designs and Trademarks Registration Act of the Islamic Republic of Iran

29) Item 2, Paragraph 1, Article 2, the Korean Trademark Act

of natural persons.” The Commercial Code of Iran defines a “business name” and states that “in the same district no one may use as a business name, a business name already registered even though the name submitted for registration is the applicant's surname”³⁰⁾ and such cases cannot be protected by the law. It also states that “the Ministry of Justice shall lay down the formalities for registration of business names and for their publication, as well as the procedure to be adopted in lawsuits relating to such names.”³¹⁾ However, a legislation for the registration process did not proceed, so businesses had to register their names as trademarks in a working level.³²⁾ The inclusion of business names to the trademarks by the 2008 revision was the legislation of working-level practices that had been registering their business names as trademarks.

The Korean Trademark Act defines trademark (service mark included), collective mark, certification mark, geographical indication, and other marks, but Iran's IP law defines trademark, collective mark, and business name, so they have limited categories in their trademark law.

(1) Registration Requirements

The Patents, Industrial Designs and Trademarks Registration Act of the Islamic Republic of Iran states that the trademark requirements must be distinguishable, not confusing, and abide by the Rules of Sharia, public order, or morality.³³⁾ Moreover, article 32 of the law lists the cases of unregistered trademarks and states that if a trademark is incapable of distinguishing the goods or service of one enterprise from those belonging to another enterprise, it cannot be registered. The Korean Trademark Act concretely states the cases when trademarks are not distinguishable, but Iran's law has an abstract and comprehensive definition.³⁴⁾ However, the law states that trademarks shall not be registered in cases when transaction parties are misunderstood and it clearly protects general consumers on possible confusion.³⁵⁾ Essentially indistinguishable mark, a name, or abbreviation or initials of the name of, or official sign or hallmark are not allowed for the registration.³⁶⁾ In addition, the cases of unregistered trademarks shall not be allowed for the registration if they harm the rightful profits of the owners, even if the service areas are different.³⁷⁾ Furthermore, any trademark that is against the Sharia, such as a trademark for alcohol drinks and simple translation version of those trademarks, shall not be registered.³⁸⁾

30) Article 578, the Commercial Code of Iran

31) Article 582, the Commercial Code of Iran

32) Supra note 16.

33) Article 30 and 32, the Patents, Industrial Designs and Trademarks Registration Act of the Islamic Republic of Iran

34) (a), Article 32, the Patents, Industrial Designs and Trademarks Registration Act of the Islamic Republic of Iran

35) (e), Article 32, the Patents, Industrial Designs and Trademarks Registration Act of the Islamic Republic of Iran

36) (d), Article 32, the Patents, Industrial Designs and Trademarks Registration Act of the Islamic Republic of Iran

37) (f), (g), Article 32, the Patents, Industrial Designs and Trademarks Registration Act of the Islamic Republic of Iran

38) International Intellectual Property Guidebook (Iran), p. 64

(2) Trademark Holder Rights

According to Article 40 of the Patents, Industrial Designs and Trademarks Registration Act of the Islamic Republic of Iran, a trademark holder has a sole license to use the trademark and right to generate revenues. Unregistered trademarks cannot be protected by the trademark law, but famous trademarks such as “Samsung” or “LG” shall be protected without the registrations in Iran since the country joined the Paris Convention for the Protection of Industrial Property.³⁹⁾ When a famous trademark, such as “Samsung,” is registered in Iran, a registrant can use the Samsung trademark for not just the designated product classes but for other products also. But if a famous trademark is not registered in Iran, it cannot be used on products other than the designated ones.⁴⁰⁾

The validity of registration of a Mark shall be 10 years from the filing date of its application for registration. This period may, at the request of its owner, be renewed for consecutive periods of 10 years, upon payment of the prescribed fees.⁴¹⁾ As the grace period is six months running from the expiration date, a trademark will be protected for 10 years and six months without renewal of the registration.

(3) International Application and Registration of Trademarks

Korea and Iran are allies in the Madrid Agreement; therefore these two countries can register for trademarks easily using the Madrid system. An applicant of a trademark to KIPO can designate Iran as the destination for trademark application in a foreign nation and submit the English version of the documents required to the International Bureau (IB). Then, the application documents will be delivered to the Industrial Property Office of Iran for substantive examinations. After submitting the documents, it will take about a month for review and research. The office will notify the applicant if additional documents are required or modification of the documents is needed.⁴²⁾ If an applicant is Iranian, he/she can submit additional documents or revise the application documents within a month. For a foreigner, the period is 60 days.⁴³⁾ The Industrial Property Office must make announcements on newspapers about trademarks that were requested to be registered after international applications and anyone can raise objections within 30 days.⁴⁴⁾ When an applicant is given a notification of provisional refusal, the applicant can submit opinions. If the applicant is a foreigner, the applicant must go through a lawyer who lives in Iran to submit opinions. The Industrial Property Office is composed of a committee that makes decision on registration.⁴⁵⁾

39) Article 6, the Paris Convention for the Protection of Industrial Property

40) The 1st Korea-Iran Intellectual Property Seminar, organized by the Korean Embassy to Iran, September 2017.

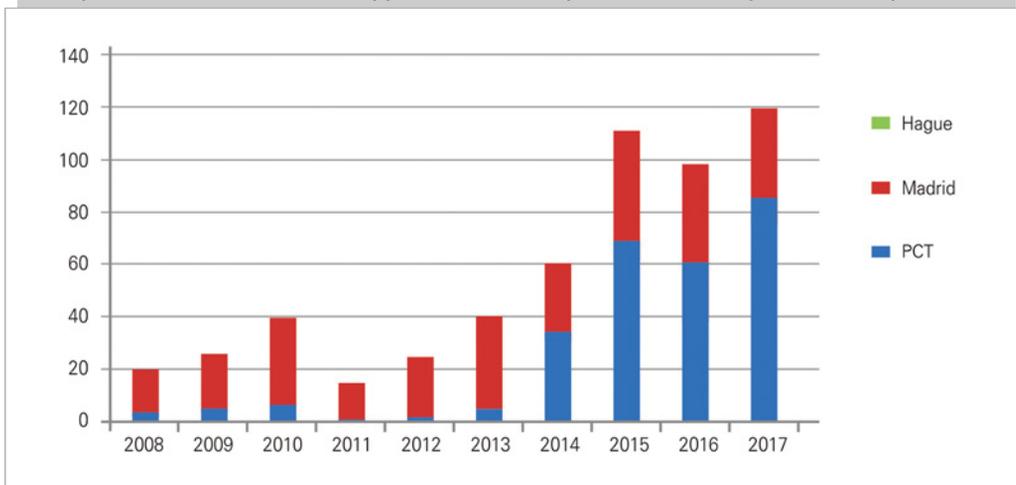
41) (d), Article 32, the Patents, Industrial Designs and Trademarks Registration Act of the Islamic Republic of Iran

42) The 1st Korea-Iran Intellectual Property Seminar, organized by the Korean Embassy to Iran, September 2017.

43) Article 110, the enforcement decree of the Patents, Industrial Designs and Trademarks Registration Act of the Islamic Republic of Iran

44) Article 120, the enforcement decree of the Patents, Industrial Designs and Trademarks Registration Act of the Islamic Republic of Iran

[Figure 1-15] International application and registration development through WIPO



Source: WIPO Statistical Country Profiles: Iran

(4) Trademark Hijacking

Because the Trademark Act follows the principle of registration, registrations via prior applications give exclusive rights to applicants who registered trademarks first. As the principle of registration bestows rights for trademark not for actual uses of trademarks but for prior applications, the realities of trademark are not reflected.⁴⁵⁾

Trademark hijacking is an act of registering a trademark of a third party that is well known in foreign countries, before it enters the local market. That is the case when someone local makes an application for a famous trademark of another country before it even enters Iran, thereby the proper owner of the trademark is being hindered to enter the Iranian market. Other cases would be selling of the applied trademark to the proper owner or counterfeit goods by free-riding the accumulated images or credibility of the trademark.

The Iranian market is particularly suffering from the trademark applications of the Persian language translated version of famous trademarks from overseas. For example, there was a case of a trademark application to the Iran Industrial Property Office for “ARMAN,” similar to the world-renowned Italian trademark “ARMANI,” in the Persian language translated version. The applicant wanted to use “ARMAN” on saffron, a traditional spice of Iran. GA Mode fine SA, the Italian trademark holder of “ARMANI,” filed a litigation for revocation and the first instance court dismissed the litigation for the Persian word “ARMAN,” which means “desire,” and as the word does not have ‘i’ at the end as well as

45) The 1st Korea-Iran Intellectual Property Seminar, organized by the Korean Embassy to Iran, September 2017.

46) KIPO (2012), An Introduction Plan of a Principle of Utilization to Supplement the Weakness of the Principle of Registration for the Trademark Act, p. 13

because the two words are used in different products, consumers will not be confused by the titles. Nevertheless, the second instance court ruled to revoke the application because the two words are very similar in terms of pronunciation, so consumers might be confused.⁴⁷⁾ Similarly, in the case where the trademark “ARMAN” of the Persian language was used for shoes, the court of Iran decided that the consumers could be confused between the trademarks as the two words have similar spellings as well as pronunciations and were used in the same product class.⁴⁸⁾ In another prior occupation case of the English word “Tena” and Persian word “Lena,” the court of Iran rejected the possibility of confusion because although the two trademarks have similar pronunciations, formats and spellings are not similar and the word TENA was registered in English without Persian equivalent whereas LENA was registered in Persian without English counterpart.⁴⁹⁾

In the end, to prevent the prior occupation of the Persian trademarks translated from English, the companies must register their trademarks both in English and Persian to enter the Iranian market. Even if a trademark is recognized as a famous mark in Korea, it is very difficult to prove that in Iran. In addition, when the Iranian government has a strong will to protect the Iranian applicants, it is difficult to protect the rights of holders of Korean trademarks. Considering this, the trademarks must be registered in English and Persian along with reviews in advance for the existing registrations in Persian.

C. The Industrial Design Act Overview

There were no regulation details about industrial design in the laws of Iran until the revision of the Industrial Property Act in 2008. As the Paris Convention states, “The countries to which this Convention applies constitute a Union for the protection of industrial property⁵⁰⁾; therefore, Iran ensured that industrial designs that need trademark should be registered because of convention, but they are not protected by the law as the amended 2008 Industrial Property Act does not include industrial designs.

Industrial designs are deemed to be any composition of lines or colors or any three-dimensional form, whether or not associated with lines or colors.⁵¹⁾ An industrial design can be registered if it is new and or original.⁵²⁾ If an industrial design has been disclosed to the public, anywhere in the world, by publication in tangible form or by use or in any other way, prior to the filing date of the application or, where applicable, the

47) Mojgan Jahanpour, Protection of Well Known Trademarks in Iran, Prime IP Services, <http://www.intelproplaw.com/Articles/cgi/download.cgi?v=1194136123>

48) Mohammad Badamchi, Protecting IP rights in Iran, http://www.buildingipvalue.com/n_eu/302_306.htm

49) Ibid.

50) Article 5, the Paris Convention for the Protection of Industrial Property

51) Article 20, the Patents, Industrial Designs and Trademarks Registration Act of the Islamic Republic of Iran

52) Article 21, the Patents, Industrial Designs and Trademarks Registration Act of the Islamic Republic of Iran

priority date of the application for registration, it is not considered as new and the exception of public disclosure applies the same to an industrial design.⁵³⁾

The application for registration of an industrial design filed with the Industrial Property Office shall be accompanied by drawings, photographs, or other adequate graphic representation of the article embodying the industrial design and an indication of the kind of products for which the industrial design is to be used. Where the industrial design is three-dimensional, the Industrial Property Office may request a real specimen or a maquette of the same along with the application.⁵⁴⁾ After receiving the application, the Industrial Property Office shall examine the application through formality examinations and substantive examinations, the same as with patents.⁵⁵⁾ The registration of an Industrial Design shall be valid for five years from the filing date of the application for registration. This period may be renewed for two further consecutive periods of five years after payment of the prescribed fees.⁵⁶⁾

2. Iran's Copyright Law Overview

A. Laws Related to Copyrights and Copyright Law in 1970

Iran's copyright law is the "Act for Protection of Authors', Composers' and Artists' Rights" enacted on January 12, 1970. On August 22, 2010, the Iran Islamic Consultative Assembly revised the law to extend the copyright protection period from 30 to 50 years after the death of copyright holders: the authors. Other than that, there has been no revision on the law. In addition, the "Translation and Reproduction of Books, Periodical and Phonograms Act" enacted in 1973 and the "Act on the Protection of Rights of Computer Software" enacted in 2000 are applied. The works on the Internet are protected by the Electronic Commerce Law of the Islamic Republic of Iran.⁵⁷⁾

The "Act for Protection of Authors', Composers' and Artists' Rights" contains 33 articles along with Part 1: Definition, Part 2: Rights of the Author, Part 3: The Period of Protection of the Author's Rights and Other Legal Protections, and Part 4: Infringement of the Law and Punishment. Considering that the Korean Copyright Act consists of around 130 articles, Iran's law is simple and that the system does not deal with various issues in concrete ways.

53) Article 21, the Patents, Industrial Designs and Trademarks Registration Act of the Islamic Republic of Iran

54) Article 22, the Patents, Industrial Designs and Trademarks Registration Act of the Islamic Republic of Iran

55) (b), Article 27, the Patents, Industrial Designs and Trademarks Registration Act of the Islamic Republic of Iran

56) (d), Article 28, the Patents, Industrial Designs and Trademarks Registration Act of the Islamic Republic of Iran

57) Supra note 16.

B. Works and Rights of Author

According to the Act for Protection of Authors', Composers' and Artists' Rights, works are defined as product of authors' knowledge, originality or art, irrespective of the method used. Therefore, anything that has no artistic value or creativity, such as fruits of hard works without creativity cannot be protected by the copyright law.⁵⁸⁾ According to the law, authors are writers, composers, and artists, therefore, performers could be included as authors but it may interpret that authors are only limited in the realm of art. Iran's copyright law does not have any specific details on database or computer software. But the software developed in Iran is protected by the Protection of Rights of Computer Software Act.

The Act for Protection of Authors', Composers' and Artists' Rights provides author's rights that include property rights and moral rights. It states author's property rights as "intellectual rights."⁵⁹⁾ Author's rights include exclusive right to publish, broadcast, perform, and publicize works, but there's no details on public transmission that Iran has to regulate the infringements on the Internet via a right to reproduction.⁶⁰⁾ As the Korean Copyright Act gives seven rights including Right of Reproduction, Right of Public Performance, Right of Public Transmission, Right of Exhibition, Right of Distribution, Right of Rental, and Right of the Production of Derivative Works, Iran's exclusive rights of authors are somewhat limited.

3. The Current Status of Iran's Joining International Agreements Related to Intellectual Property

Iran joined the Paris Convention for the Protection of Industrial Property in 1959 to protect industrial property rights and the agreement establishing the WIPO in 1999. In 2003, Iran joined the Protocol Relating to the Madrid Agreement Concerning the International Registration of Marks. The Madrid system on the international registration of mark follows the Madrid Agreement of 1891 and the protocol of the agreement concluded in 1989.

In 2004, Iran joined the Madrid Agreement for the Repression of False and Deceptive Indications of Source on Goods. Iran joined the Lisbon Agreement for the Protection of Appellations of Origin and their International Registration in 2006 and the Patent Cooperation Treaty in 2013.

Iran shows the fastest-growing pace about the industrial design area in the world. To strengthen the protection of industrial designs, Iran joined the "Locarno Agreement Establishing an International Classification for Industrial Designs" in July 12, 2018. By doing

58) Article 1, the Act for Protection of Authors', Composers' and Artists' Rights

59) Article 3 and Article 4, the Act for Protection of Authors', Composers' and Artists' Rights

60) Article 4, the Act for Protection of Authors', Composers' and Artists' Rights

so, Iran forms a special union with other member countries and adopts the international common classification system on industrial designs. The Locarno Agreement is revised every five years, that the 10th edition classification has been implemented since January 2014. It contains 32 classes, 223 subclasses, and 7,024 entries. The international classification is only for administrative purposes and does not bind member countries on characters and ranges of protection on designs, but the Industrial Property Office of Iran must enter international design class and subclass numbers publicly for donation or registration of designs.

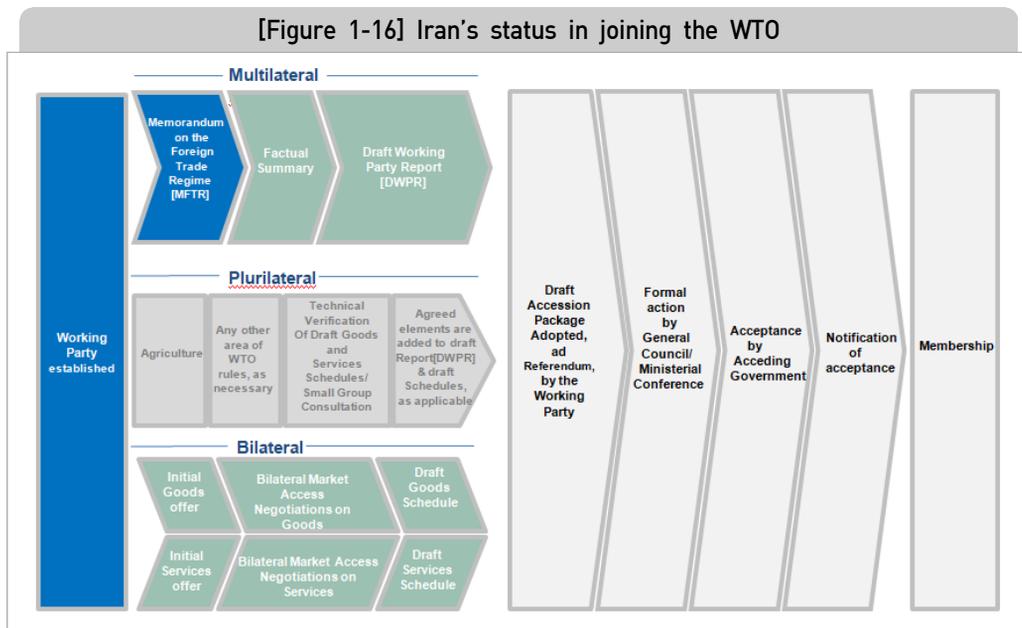
At the same time, the Iranian government joined the “Nice Agreement Concerning the International Classification of Goods and Services for the Purposes of the Registration of Marks” on July 12, 2018 and follow the international classification of goods and services designated by the Nice Agreement. The agreement was first signed in Nice, 1957, as a classification for trademarks and service marks. Later, it was enacted in Stockholm, 1967, and Geneva, 1977. The agreement was revised in 1979. The Nice classification has advantages of the same international classification on product and service businesses, easy application and registration in the world market, claiming priority, registration system of multiple classes by single application, simultaneous applications on multiple countries, and lastly, acting as preconditions for joining the Trademark Law Treaty (TLT) and Madrid Agreement. The Nice classification is revised every five years and currently the 11th edition (2017-2021) classification has been implemented. There are 45 classes of products and services in use since January 1, 2017.

[Table 1-3] Status of international agreements that Iran joined

Agreement	Date of Joining
Locarno Agreement Establishing an International Classification for Industrial Designs	July 12, 2018
Nice Agreement Concerning the International Classification of Goods and Services for the Purposes of the Registration of Marks	July 12, 2018
Patent Cooperation Treaty	October 14, 2013
Lisbon Agreement for the Protection of Appellations of Origin and their International Registration	March 9, 2006
Madrid Agreement for the Repression of False or Deceptive Indications of Source on Goods	June 18, 2004
Madrid Agreement Concerning the International Registration of Marks	December 25, 2003
Protocol Relating to the Madrid Agreement Concerning the International Registration of Marks	December 25, 2002
Convention Establishing the World Intellectual Property Organization	March 14, 2002
Paris Convention for the Protection of Industrial Property	December 16, 1959

Iran is currently not involved with any international agreements in relation with copyrights. Iran is planning to join the WTO and to do so, the country must first satisfy conditions to join the WTO like other members of the WIPO. As Iran joined the WIPO, the country must approve contents of agreements directed by the WIPO and “Agreement on Trade-Related Aspects of Intellectual Property Rights, TRIPS,” but the approval process is currently not being done.⁶¹⁾

Iran submitted an application to join the WTO on July 19, 1996, but it was opposed from 1996 to 2001 as part of the US political sanction against Iran's support for international terrorism. As a developing economy, Iran's request to join the WTO was introduced to the general council. About 22 general council meetings were opened to discuss the joining of Iran, but none of them reached an agreement. The United States temporarily withdrew their refusal of Iran joining the WTO to ease the international nuclear negotiation in March 2005. Therefore, the whole member countries approved to form the WTO Working Party on May 26, 2005, providing Iran with a position of observer.⁶²⁾ In November 2009, as Iran submitted the Foreign Trade Regime Memorandum to the WTO executive office, the country entered into a new stage to join the WTO.⁶³⁾



Source: WTO Website: Current status in the accession process of Iran

61) Supra note 16.

62) Ibid.

63) Ibid.

Currently, the Iranian government considers joining the “Berne Convention for the Protection of Literary and Artistic Works” and “Rome Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations,” which are considered as basic international agreements for copyright protection, to enhance protection of authors along with the WTO. To do so, the government laid a more systematized revisions on copyright protection before the Islamic Consultative Assembly.

Chapter 3. The Current Status of the Intellectual Property Unified Operation of Iran

1. Ministry of Justice and Intellectual Property Council

The Iranian government installed the “Iran Intellectual Property Office” and “Intellectual Property Council” under the Ministry of Justice to manage the IP. The two bodies established IP-related national policies, review laws and enforcement decrees, manage the IP Training Center, execute IP-related trainings, review international agreements, advise on IP for the administrative divisions of Iran and the Legislature of Iran, as well as coordinate cooperation and harmony between the administrative divisions and judicial system of Iran. The Intellectual Property Office under the Ministry of Justice has departments of industrial property, traditional medicine, culture and art copyrights.⁶⁴⁾

The Ministry of Justice operates the Intellectual Property Council as the “National Council for Planning and Coordination of IP Matters.” The Minister of Justice is the president of the council. This council constitutes 18 government bodies that include the Ministry of Industry, Mine and Trade, Ministry of Foreign Affairs, Iran Intellectual Property Office, Ministry of Science Research and Technology, Ministry of Health and Medical Education, Ministry of Agriculture Jihad, Ministry of Culture and Islamic Guidance, Ministry of Intelligence and National Security, Ministry of Defense and Armed Forces Logistics, Iran Armed Forces, Ministry of Youth Affairs and Sports, IRIB, Science and Technology Vice-Presidency, Chamber of Commerce, Iranian Cultural Heritage Organization, National Library, Department of Environment, and Customs.⁶⁵⁾ Inside the council, there are committees for industrial property, copyright, traditional knowledge, and folklore. The pending issues are discussed in regular meetings and special committees if necessary.⁶⁶⁾

As the Ministry of Justice is managing and operating the overall IP matters, including policy establishments on IP, application and registration on IP are being managed by the

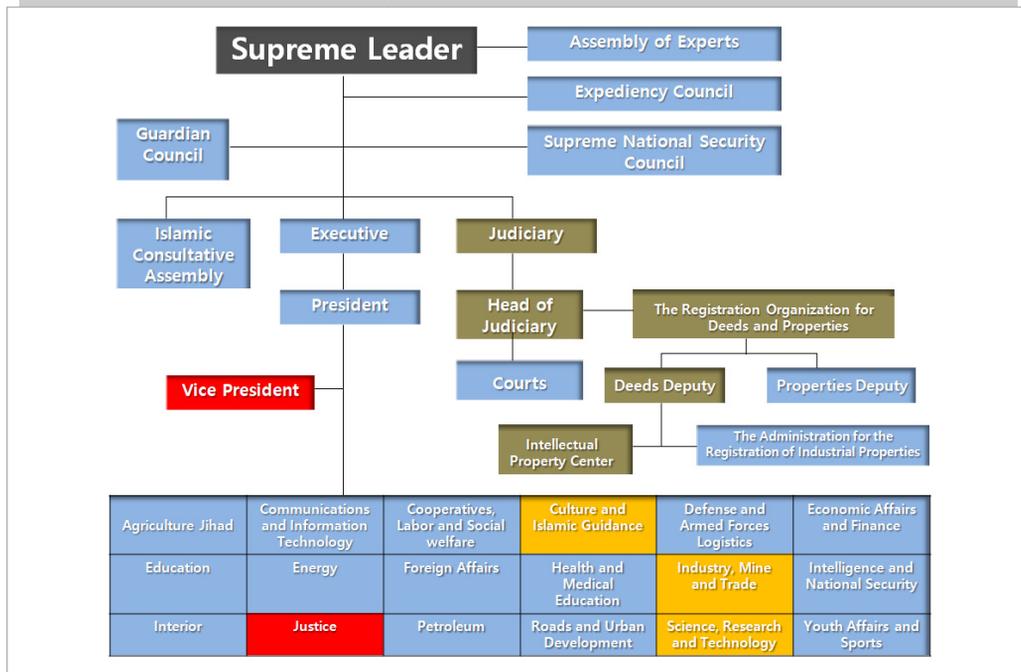
64) The 1st Korea-Iran Intellectual Property Seminar, organized by the Korean Embassy to Iran, September 2017.

65) Ibid.

66) Ibid.

Industrial Property Office under the judicial system of Iran.

[Figure 1-17] The organizational chart of the Iranian government



In Korea, KIPO, under the Ministry of Trade, Industry and Energy, manages patent, utility model, design, and trademark, and their examination and judgment.⁶⁷⁾ However, Iran's Ministry of Justice, under the administrative divisions of Iran, serves as the president of the Intellectual Property Council, and the Industrial Property Office under the judicial system of Iran, manages judgments on patent, trademark, geographical indication, and other properties. This dual structure can cause difficulties in cooperation and unified IP management between government departments on IP, overlapped investments on examiner trainings and search systems, as well as other possible issues on unified management on IP. This could also cause cooperation issues between departments in terms of policy enforcement.

While the Ministry of Culture and Islamic Guidance and IRIB are managing copyright related tasks, Iran did not join any international agreements regarding copyright. The authors receive copyrights upon the creation of their works with knowledge, creativity, and technology.⁶⁸⁾ The Ministry of Culture and Islamic Guidance operates the work registration system for authors to register their works by themselves.⁶⁹⁾

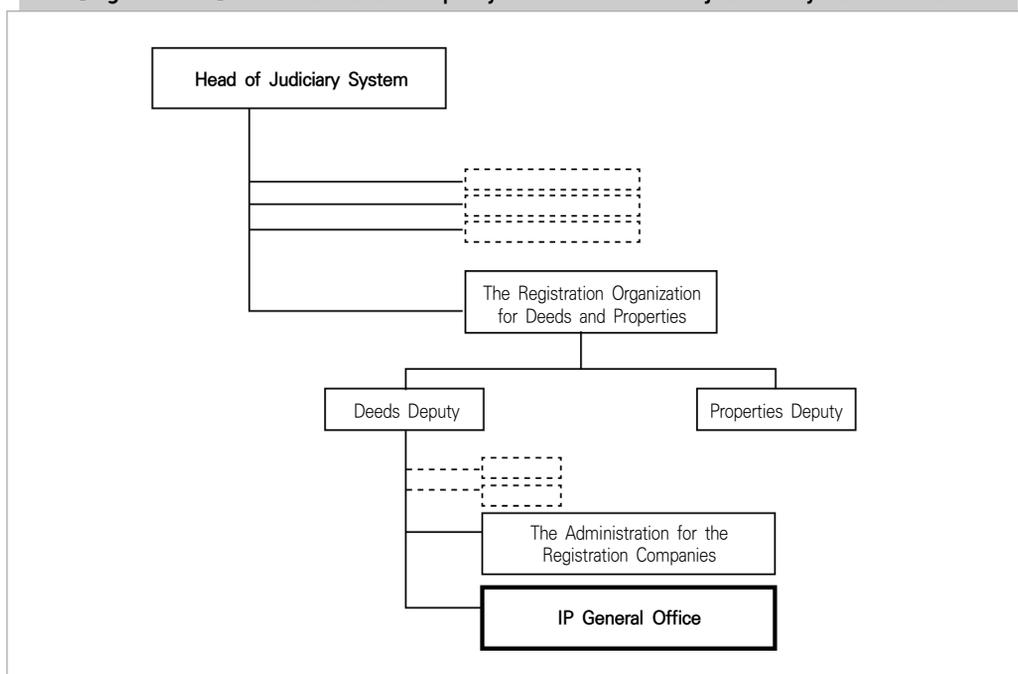
67) Paragraph 5, Article 37, the National Government Organization Act (Act No. 11690)

68) Article 1, the Act for the Protection of Authors, Composers and Artist Rights

2. The Industrial Property Office

The application and registration of industrial properties are managed by the Industrial Property Office under the judicial system of Iran. In the past, registrations of businesses and industrial properties were managed in one government office, but as the Office of the Vice President for Management and Planning installed the Industrial Property Office in 2007,⁷⁰⁾ the registration office for businesses and nonprofit organizations was separated from the registration office for industrial properties.⁷¹⁾

[Figure 1-18] The Industrial Property Office under the judicial system of Iran



The Industrial Property Office manages the registration of models and samples of trademark, geographical indication, patent, mark, style, and consumption good, as well as industrial property examples that require registration or change of registered examples. In addition, the office manages the execution and management of the current and future industrial property-related agreements and conventions of Iran. Moreover, the office is responsible for awareness raising and enhancing the capabilities of the public related to commercialization of IP.⁷²⁾

69) The 1st Korea-Iran Intellectual Property Seminar, organized by the Korean Embassy to Iran, September 2017

70) Decree 194000/624 (2007/2/18).

71) Supra note 10 at 18.

72) Supra note 10 at 18.

Chapter 4. The Current Status of the Intellectual Property Search System of Iran

Before an IP application, searching for prior art and the same or similar IP already registered is crucial. For this reason, countries build and manage their own database for public search.

Article 54 of the Patents, Industrial Designs and Trademarks Registration Act of the Islamic Republic of Iran states that “The data appearing in the Registers shall be accessible to all persons, and any person may obtain his required information under the conditions as prescribed in the Regulations.” Article 167 of the enforcement decree of the same law states that the Industrial Property Office must be provided with the required infrastructure to facilitate electronic applications of all trademark, patent, and design application stages for applicants from home and abroad. Therefore, the office developed a search system for registration and application of patent, trademark, and design from June 2012, and from November 2012, the office started to receive all submitted documents on the registration and application of trademarks in electronic formats.

[Figure 1-19] The Intellectual Property Office search website of Iran



Source: Iran Industrial Property Office Search Website. <http://iripo.ssaa.ir/Default.aspx?tabid=3535>

Currently, all applications of patent, trademark, and design are being done electronically and their application numbers on the electronic application system format are automatically provided. However, the original copies of attached papers, such as power of attorney and company establishment papers of applicants, must be submitted to the registration office

in hard copies.⁷³⁾ All oppositions and objections on applications and registrations are currently submitted in electronic format. But applicants must be mindful when submitting the original documents to the examiners after submitting them electronically.⁷⁴⁾ The search website allows users to search information on patent, trademark, industrial design, and geographical indication. Typing keywords or registration numbers will bring up application number, registration number, applicant name, inventor name, category, and other related information.

Nevertheless, the search service can only be used in Persian language and English language service is not available. Only information on patent, trademark, industrial design, and geographical indication that were registered in Iran will appear on the system and the registration information of other countries is not available. Furthermore, even the registered IP will often not show related information on the search results and sometimes the search result will show nothing, inaccurate statement, or information without any claim. The database need to be complemented.

[Figure 1-20] The Intellectual Property Office search website of Iran

The screenshot shows the search interface of the Intellectual Property Office of Iran. At the top right, there is a logo with the text 'قوه قضائیه' (Judicial Branch) and 'سازمان ثبت اختراعات و علائم تجاری' (Intellectual Property Office). Below this is a navigation bar with links: 'صفحه اصلی' (Home), 'ثبت اختراع' (Patent), 'ویرایش اختراع' (Edit Patent), 'بگیری اظهارنامه' (File Application), and 'جلب اظهارنامه' (Retrieve Application). The main heading is 'فرم مربوط به جستجو در پرونده های اختراع' (Form related to search in invention files). A yellow banner below it says 'با استفاده از این صفحه شما می توانید در میان اختراعات ثبت شده در اداره جستجو کنید.' (Using this page, you can search among registered inventions in the office). The search form includes a dropdown menu for 'اطلاعات پایه جستجو' (Basic search information) with a selected option 'در عنوان اختراع، مشابه عبارات وارد شده وجود داشته' (In the title of the invention, similar expressions entered exist). There are input fields for 'عنوان اختراع' (Invention title), 'کلمات کلیدی' (Keywords), and 'شمار ثبت' (Serial number). Checkboxes are present for 'وضعیت اظهارنامه' (Application status) with options 'ثبت شده' (Registered), 'رد شده' (Rejected), and 'در حال بررسی' (Under review). A blue 'جستجو' (Search) button is at the bottom.

73) Ibid., p. 19.

74) Ibid.

Chapter 5. The Current Status of the Policies for the Commercialization of SME Patent Technologies of Iran

1. Importance of SMEs in Iran

Korean SMEs are companies that are subject to the SME support policy. There are companies for profit that have certain criteria of scale and independency as well as those that are social enterprises that are subject to the Social Enterprise Promotion Act.⁷⁵⁾ A scope stated in the Framework Act on Small and Medium Enterprises is a company with certain standard in the amount of average sales or annual sales in its main business area and the company itself, as well as a company with less than KRW 500 billion in its total assets amount.⁷⁶⁾ Although standard conditions to be considered as SMEs are different in business fields, but following the enforcement decree of the same law, companies with more than 1,000 full-time workers, above KRW 500 billion of the total assets, above KRW 100 billion of the capital owned by the business, and above KRW 150 billion of average sales in the previous three consecutive business years are not considered as SMEs.⁷⁷⁾

Meanwhile, Iran's description of SME is difficult to define because of the different techniques, criteria, and definitions of related divisions, departments, and organizations of SMEs. For example, the Ministry of Industries & Mines and Ministry of Agriculture define SMEs to have 50 workers or less, but the Iran Small Industries and Industrial Parks Organization defines SMEs to have between 5 and 50 workers at the most. In addition, the CBI defines SMEs to have 10 to 99 workers at the most.⁷⁸⁾

75) Paragraph 1, Article 2, the Framework Act on Small and Medium Enterprises

76) Item 1, Paragraph 1, Article 3, the Enforcement Decree of the Framework Act on Small and Medium Enterprises

77) Paragraph 1, Article 3, the Enforcement Decree of the Framework Act on Small and Medium Enterprises

78) <http://agahgroup.com/smes-in-iran-a-brief-introduction/>

[Table 1-4] The definition of SMEs in Iran

Entity	Max. Quorum Staff	
Ministry of Industries & Mines	50	
Ministry of Agriculture	50	
ISIPO	5–50	
Executive Decree for Fast Return SME	50	
Central Bank of Iran	Micro	10
	Small	10–49
	Medium	50–99
	Large	>100

Source: CBI

For example, the CBI shows that there are around 82,810 small enterprises as well as 7,707 SMEs and large enterprises. The contribution of SMEs to the industries is at 94%, whereas 70% of job creation and 50% of GDP are because of small enterprises.⁷⁹⁾

[Table 1-5] The economic importance of SMEs in Iran

Countries	Different Enterprises' Contribution to Economy, %				
	SMEs' Share	Micro	Small	Medium	Large
EU (2009)	99.8	92.2	6.5	1.1	0.2
Italy (2009)	99.9	95.8	3.6	0.5	0.1
United States (2005)	57.9	11.1	32.8	14	42.1
Turkey (2012)	99.9	95.54	4.03	0.35	0.08
Indonesia (2012)	99	98.8	1.11	0.09	N/A
Malaysia (2011)	97.3	75	19	3	0.3
Iran (2014)	98	47	45	6	2

Source: ISIPO

79) <http://agahgroup.com/smes-in-iran-a-brief-introduction/>

2. Iran's Commercialization Policy of Patent Technologies and Effects

As the commercialization of patent technologies contributes more to the promotion of national competitiveness, Iran has been executing various policies to facilitate and accelerate the commercialization of patent technologies. To promote the commercialization of patent technologies in Iran through a multiple case study on 10 successfully commercialized patent technologies, the research team analyzed the 10 companies with commercialized technologies registered in the Iran Intellectual Property Office based on an in-depth case research.

[Table 1-6] Company information for the research

Company Number	1	2	3	4	5	6	7	8	9	10
Business Field	Food and Beverage	Electronics/Medical Device	Advanced High Molecule Material	Oil and Gas	Software / AI	Nanotechnology, Agriculture	Oil and Gas / Medicine	Electronics and Microelectronics	Medical and Pharmaceutical	Civil Engineering / Architecture
Scale (number of employees)	200	180	60	50	44	40	12	10	3	3
Years of company existence	46	15	6	13	10	4	3	2	3	4
Experience on patent commercialization (Yes/No)	Yes	Yes	Yes	Yes	No	Yes	No	No	No	No
Local market size (Large/Normal/Small)	Normal	Large	Normal	Large	Normal	Normal	Small	Small	Small	Small
Foreign market size (Large/Normal/Small)	Large	Large	Small	-	-	-	-	-	-	-
Research continuity (Yes/No)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
University/Research center cooperation (Yes/No)	Yes	No	Yes	No	No	Yes	No	No	Yes	No
Collaboration with other company (Yes/No)	Yes	Yes	Yes	No	No	No	No	No	No	No
Management knowledge of inventor/enterpriser (High/Normal/Low)	High	High	Low	High	Low	High	Low	Low	Low	Low

[Table 1-6] Continued

Company Number	1	2	3	4	5	6	7	8	9	10
Industrial property-related knowledge (High/Normal/Low)	Low	Normal	Low	Low	Low	Normal	Low	Low	Low	Low
Academic degree of inventor/enterpriser (Relevant/Irrelevant)	Irrelevant	Relevant	Relevant	Relevant	Relevant	Irrelevant	Relevant	Relevant	Relevant	Relevant
Commercialization channel (Product/License)	Product	Product	Product	Product	Product	Product / License	Product	Product	Product	Product

3. Analysis Results of Individual Cases

All cases for the study are successful cases of patent technology commercialization. The first analysis on performances of 10 cases shows that the patent technology commercialization is more effective if a company size is larger and the business period is longer. This disproves that low business management knowledge of Iranian science and engineering scholars acts as one of the discouragements in the market. Actually, one of the important findings of this research is that although inventors and enterprisers all achieved academic degrees on science or engineering, they did not attend any business management-related classes in their degree courses.

The second analysis shows that several Iranian inventors and companies consider the production and sales of their goods as almost the only means of commercialization. Only 1 out of 10 companies for the study chose to sell licenses. This company raised significant amount of profits via license commission, but it changed its strategy as soon as it acquired enough money to build its own production facility. This can be explained through a “weak appropriability regime”⁸⁰⁾ and it shows that several innovative companies of Iran achieved patent technology commercialization through direct manufacturing and selling because of weak patent rights in the country.

The third analysis shows that inventors and enterprisers have comparatively weak knowledge on IP. Interestingly, general recognition of inventors and enterprisers on the

80) A regime of appropriability means an institutional environment that allows innovators to exclusively acquire profits from innovative technologies. In the case of a country where its legal system is weak to protect patent technologies, small innovative companies cannot rely on a contractual agreement to acquire complementary assets for technological commercialization. Therefore, they choose a unified strategy that produce and sell products based on patent technologies with the companies that bear the burdens of securing capital.

ineffectiveness of Iran patent rights was formed based on simple hearsays. One of the study cases shows that the company filed a lawsuit in court about a patent right infringement and the company patent right was successfully protected. This shows that Iran's system to protect patents are not weak as many inventors and enterprisers consider.

4. Analysis of Policy Effectiveness and Results

An analysis of the government policy effectiveness shows that most of the companies used the government financial support policy and six of the responded cases answered that the effectiveness is “very high” and two of them answered “high.” This means that the financial support was effective on the patent technology commercialization. In these study cases, the conclusion will be that the “government procurement assurance” was a very effective financial support in terms of promoting the patent technology commercialization in Iran.

However, despite the importance of financial support for technology commercialization, many of the study participants experienced difficulties on the long and complex application procedures. The companies had to go through long and complex qualification examination process and most of the time they took years before approval.

The second most effective policy for the patent technology commercialization was services that were given through the technology training center of the government. Most of the study subjects said that they moved into the technology training center to acquire affordable office spaces in their early stage, but practice trainings and technology development programs that they received at the center became key elements for their success later on.

In addition, the study showed that a support policy on using university research facilities was very efficient in terms of achieving technology commercialization. Many innovative companies often need to use expensive and professional experimentation spaces or related equipment. But it is not easy for SMEs to purchase the equipment. To overcome such limit, the government supported the companies by allowing them to use university research facilities. Many companies were successful in their technology commercialization through the given support.

Another interesting result is that some of the successful technology commercialization cases started from inventors and enterprisers who spent their sabbatical years abroad and brought innovative ideas back home. Some scholars tried to use the ideas, and some inventors and enterprisers gave them the motivation to act on their ideas.

Once the process of patent technology commercialization starts with support from the government, exchange activities and networking support will take important roles in the

next stage. Among the 10 cases of the study, only a few innovative companies of Iran received support.

[Table 1-7] Interview investigation on the patent technology commercialization policy effectiveness in Iran

++ : Very High
 + : High
 0 : Low
 - : Not mention or no recognition

	1	2	3	4	5	6	7	8	9	10
Financial support	-	++	++	++	++	-	++	+	++	+
Medical insurance	-	0	0	0	+	+	0	0	0	0
International patent	-	-	-	-	-	-	-	-	0	0
Invention exposition	-	0	0	0	0	-	0	+	-	0
Exchange activity/ networking support	-	-	++	-	-	-	-	-	+	-
University Research facility support	+	-	++	-	-	-	-	-	++	-
Technology promotion service	+	-	++	-	+	++	+	++	+	-
Overseas study	-	-	-	-	++	+	++	-	++	-
Amrieh (substitution of military service with research)	-	-	+	-	-	-	-	+	-	+

5. Policy Implication

This study diagnosed and analyzed the government policies to support the patent technology commercialization of Iran and its effectiveness. After a cross analysis on the 10 cases, the effectiveness of the government patent technology commercialization policies that beneficiaries recognize are varied depending on different cases. This suggests that a generalized and standardized government support policy has not been formed. Nevertheless, some of the policies carried out important roles on the successful commercialization of patent technologies. The two policies that beneficiaries felt most effective were financial support and various services provided by the technology training center.

In conclusion, some of the existing government support policies were not effective on accelerating the patent technology commercialization. For example, a media report saying that the government receives support and participation in invention and innovation expositions has analyzed that these are not effective on the patent technology commercialization process. In-depth case studies on technology commercialization in Iran

revealed that the financial support and utilization of the technology training center were very effective. Moreover, overseas studies for scholars and inventors gave direct and indirect positive influences on technology commercialization.

As the Iranian industries show that SMEs have a 94% contribution, raising the SMEs through technology commercialization is very meaningful for the economy. According to this study, the technology commercialization of Iran SMEs only leads to the production and sale of their products based on their technologies but they are passive on technology transfer through licenses and other means. Technological innovation in a knowledge-based society is evaluated as one of the most important elements for enterprise and national competitive powers. A technological innovation includes not only a technological development but also a technology diffusion through technology transfer and commercialization. As technological developments and research results used in a society give decisive effects on national and business competitiveness, the Iranian government must pay attention and actively intervene with not only technological development policies but also technological diffusion policies through technology commercialization.

According to this study, the most effective policy for companies among Iran's technology commercialization promotion policies for SMEs was a financial support policy from the government. However, extensive and complex procedures and examinations for qualification took years of work. In addition, results could be different depending on the examiners, so the government must exert efforts to simplify the processes to acquire trust from the companies and achieve fairness for the examinations.

The study shows that a considerable number of SMEs said that they benefited from the practice trainings and technological development programs from the technology training center. The Iranian government must continue its efforts to make sure that all SMEs that do not have enough facilities, equipment, and training, can benefit from the technology training center, which has been developed and expanded for the last 20 years.

Because of lack of understanding and knowledge about IP, most SMEs that answered a survey said that they need help from technological experts to create and utilize their IP. The government need promotions for raising awareness on inventions and IP, such as expanding IP trainings for SMEs to make sure they can turn their technologies into their own IP; organize campaigns that would encourage scientific, technological, and innovative cultures through media; and introducing successful cases of inventors and technology-based companies.

2017/18 Knowledge Sharing Program
(Industry & Trade) with Iran

Part II

Policy Recommendations for Enhancing the Intellectual Property Infrastructure

- Chapter 1. Intellectual Property Policy Changes on Korea's Economic Development by Stage
- Chapter 2. The Policy Research on Successful Policies in Commercializing an Invention
- Chapter 3. Plan to Raise the Competitiveness of SMEs and Ventures through Intellectual Property
- Chapter 4. Policy Study to Strengthen Iran's Copyright Protection
- Chapter 5. Study on the Measures to Protect Traditional Iranian Products Using Geographical Indication
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Policy Recommendations for Enhancing the Intellectual Property Infrastructure

Chapter 1. Intellectual Property Policy Changes on Korea's Economic Development by Stage

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 - C. The Current Status of Intellectual Property Application and Registration
5. Summary of the Economic Development and the Intellectual Property Law and System Changes

1. Purpose of Study

The purpose is to support the overall enhancement of Iran's IP infrastructure by sharing Korea's development experiences and knowledge on the economy and IP areas through the Knowledge Sharing Program (KSP). The patent system gives positive impacts on the productivity of the value added through promotion of technological innovation, spread of knowledge and vitalization of competitive markets, as well as national developments through the value added. The laws and policies of the IP areas are closely related to the national economic development stages. Therefore, it is very meaningful for Iran to be introduced to Korea's IP-related laws and policies in the different economic development stages. Sharing the economic growth and development experience of Korea through such information will become very helpful.

2. 1960–1970s

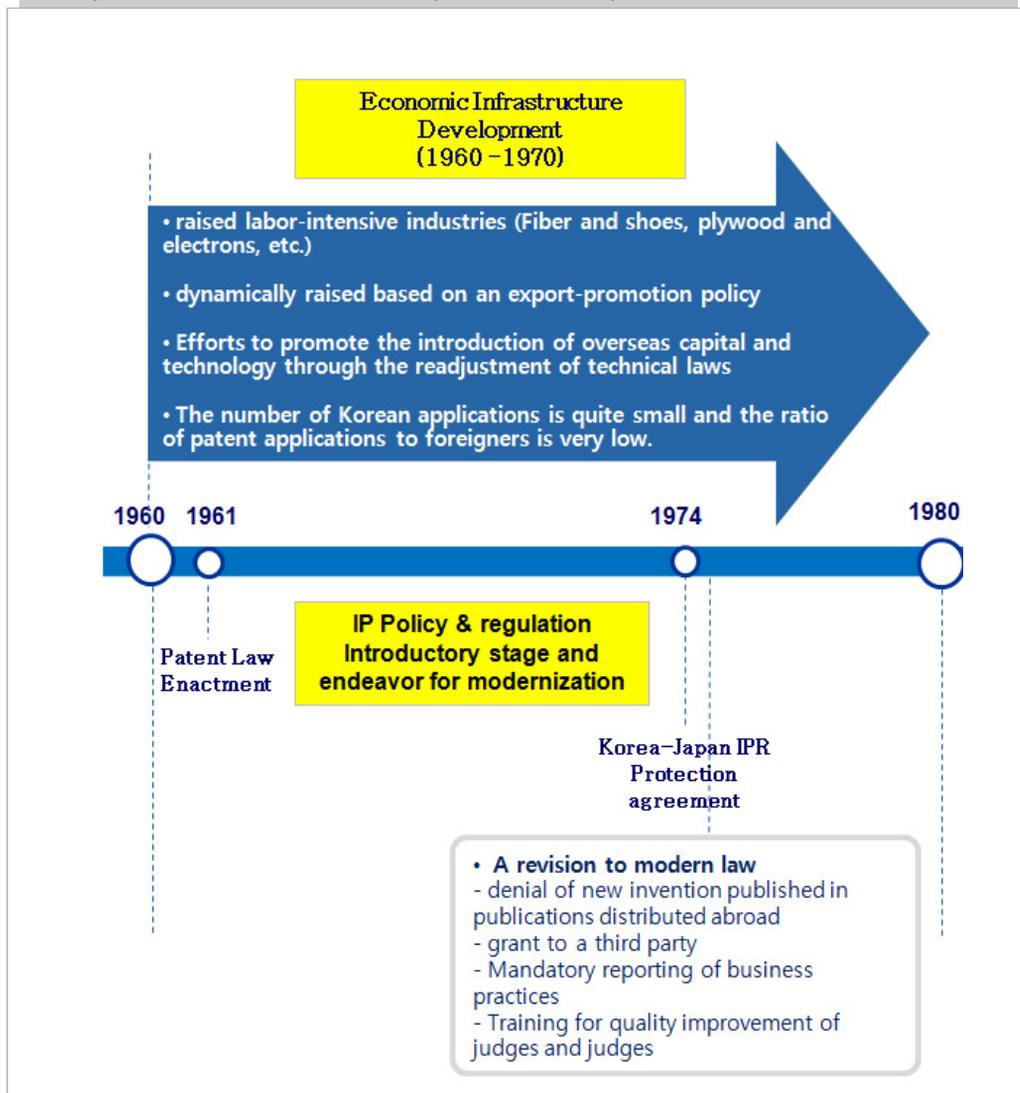
A. The Formative Period of the Korean Economy Basis

Korea's economic basis was formed from 1900 to 1970. The Korean economy dynamically raised labor-intensive industries based on an export-promotion policy.⁸¹⁾ In 1960, to rebuild the country from the ruins of the Korean War, the Korean government established a "5-year economic development plan" and promoted industrial and economic development. The core industrial policy of the first 5-year plan was industrialization, which focused on the expansion and improvement in cement, fertilizer, industrial machines, oil refinery, and other basic industries or heavy chemical industries. Moreover, Korea focused on the modernization of its industries and enhancement of global competitiveness by protecting and raising new export industries and import substituting industries to improve the international balance of payments. In the second 5-year plan (1967-1971), Korea focused on heavy chemical industries with steel, machine, oil, chemical, and various industries at the center.⁸²⁾

81) (2012) "Korea's intellectual property rights system and its application to the phases of industrial development: Focusing on the patent system," KIPO, KIIP, pp. 23–24.

82) Ko Young-sun (2008), *The Growth of the Korean Economy and Role of the Government: Past, Present and Future*, KDI, p. 179.

[Figure 2-1] The Korean economy, IP laws and policies from 1960 to mid-1970s



B. The Introductory Period of the Intellectual Property Law and Policy

From 1960s to 1970s, Korea had its introductory period on intellectual property law and policy with the first Patent Act of Korea by sole sovereignty established on December 31, 1961.⁸³⁾ In 1961, the Patent Act stated that usability in industry, novelty, and creativity are the conditions to achieve patents, and selected the first-to-file system that allows the first application to achieve patent in the same inventions. In the case when an inventor with good intention use the patent first in the application process, the act states that the inventor can use it within its scope and the patent right will last for only 12 years.

The Patent Act was revised in 1963. In detail, it created the definition of invention and moved an industrial usability from the patent conditions to the definition of invention. The act was also complemented to make sure that applicants come up with an agreement when two applications compete with each other on the same day.

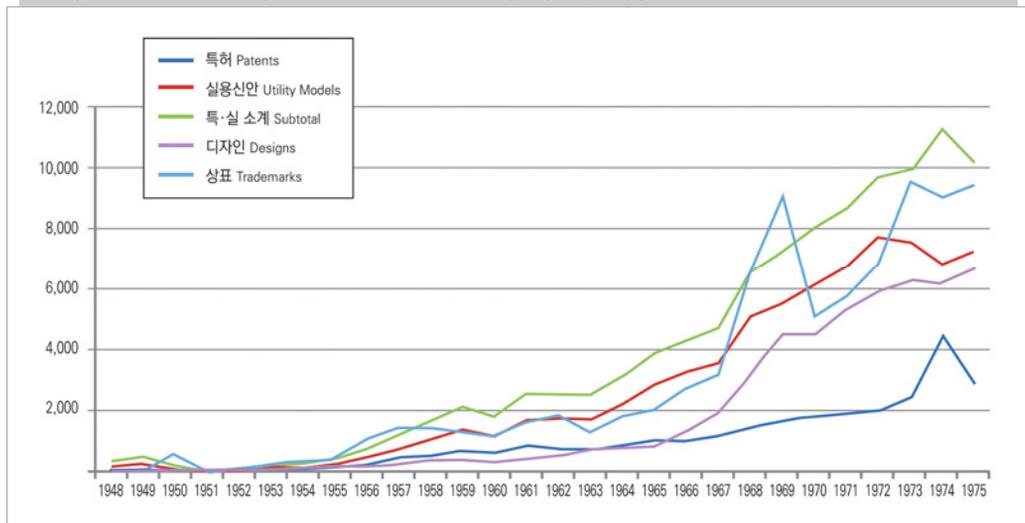
Before the Korea-Japan Protection Agreement on Industrial Property was concluded, the Patent Act was revised in 1974 to adapt to modernization. Following the technological development level of Korea at that time, the invention of use and invention of materials that can be manufactured by nuclear transformation were added to inventions that could not be patented. Moreover, to prevent covert applications of old technologies from advanced countries, the so-called semi-internationalism was implemented to make sure that inventions on foreign publications are considered not new. In addition, when the demand from the global market cannot be met because of patent monopoly by the patent holder, the third party was allowed to use a compulsory license so that foreign credits were maintained and acquisition of foreign currencies would increase. To achieve the active use and commercialization of patent inventions, an enforcement of business and its report became mandatory and a patent that did not report for three years or more was canceled or allowed to have a compulsory license. The revision also included applicable provisions to make sure that qualification training for a certain period would be given to examiners and judges.

83) Based on (2012), "Korea's intellectual property rights system and its application to the phases of industrial development: Focusing on the patent system", KIPO, KIIP, pp. 34-36, the beginning of the Patent Act of Korea was the 1908 Korean Empire Patent Act. In addition, Japan announced laws on design, trademark, company name, and copyright. As Japan installed the Residency-General patent office in Korea, the IP system was introduced in Korea as well. The IP law of the Japanese colonial era continued even after August 1945 and established into the 1946 Patent Act by the US army military government in Korea on October 1946. It implemented most of the details from the US Patent Act. After the liberation, the number of IP application in Korea rapidly grew from 1953 through the end of the 1950s. In 1961, the Korean government started to organize all laws, and, by doing so, it abolished the previous patent act and reestablished the Patent Act, Utility Model Act, and Design Act as special laws.

C. The Current Status of the Intellectual Property Application and Registration

There were 858 patent applications in 1961 and this increased to 1,463 in 1968 when the second 5-year economic development plan was implemented for two years. In 1972, when the third 5-year economic development plan was implemented, the number rapidly increased to 1,995 applications. The applications for utility models were even higher, that there were 1,683 applications in 1961, 5,129 applications in 1968, and 7,747 applications in 1972. Until 1970, the application and registration rates of residents were much higher than non-residents, and applications for utility model were more active than for patent. Furthermore, there were 1,665 trademark applications in 1961, but the number rapidly increased to 6,878 in 1972.

[Figure 2-2] Development of intellectual property applications in 1960 to mid-1970s



3. 1980s–1990s

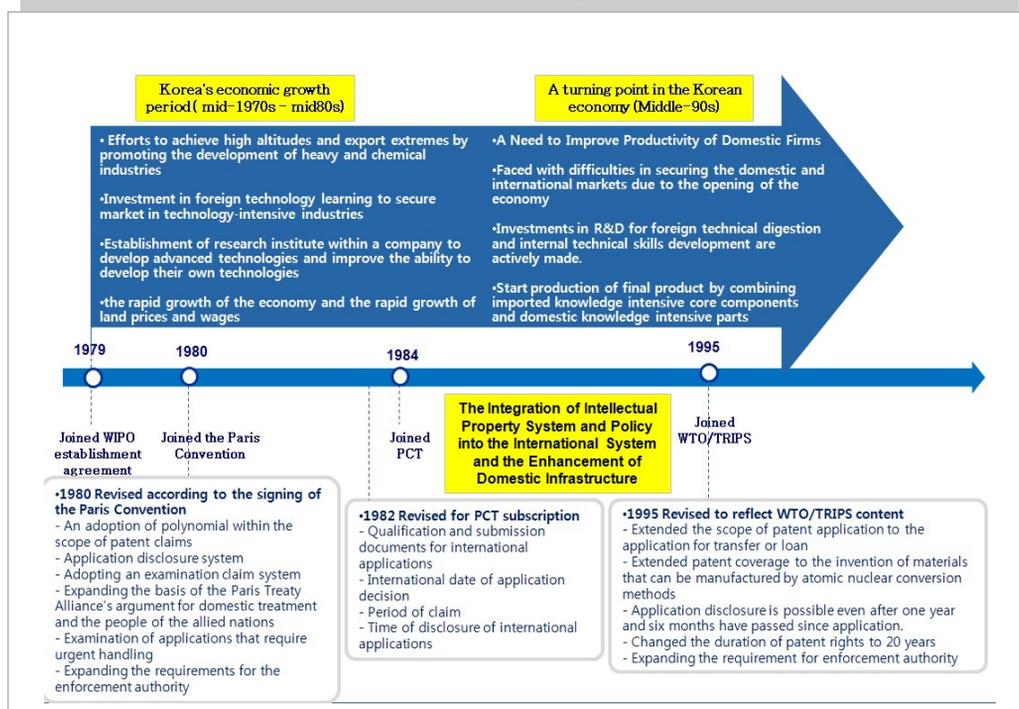
A. The Rapid Growth Period of the Korean Economy

After the continuous rapid growth of the Korean economy in the 1970s, and as land value and income increased sharply in the 1980s, the Korean companies had internal needs for production improvements and external needs for manufacturing competitive products in the global market because of the opening of the economy and economic pressures, which caused difficulties in securing the markets in the world. To enter the knowledge-intensive market, which is a higher value-added business, the Korean companies started to learn foreign technologies and focused on R&D investments to improve their technologies in the early 1980s. From this time, the Korean companies started to combine imported key parts

and components that are knowledge-intensive with local parts and components to increase the production of knowledge-intensive products and at the same time produce more knowledge-intensive key parts and components in Korea. The Korean capital good industry developed astonishingly and the Korean products started to have more brand production for exports than OEM exports as the technological level of Korean companies continued to develop so they proceeded with product innovation that is at par with the global level.⁸⁴⁾

In the 1980s, the Korean government planned a sharp turn on its policy direction. Away from the conventional “growth-first policy,” the government boldly executed a policy change into “lay the foundation of growth over stability” for the price stabilization. In addition, to establish a privately led economy from a government-led economy, the government proceeded with bank privatization and economic policy reinforcement. Such direction changes of the policy for “stability, autonomy, and openness” achieved partial success but failed to set a clearer distinction between the government and private roles as well as establish the private principles of responsibility. In 1997, Korea suffered from the 1997 Asian financial crisis.

[Figure 2-3] The Korean economy and Intellectual Property Act and System in the mid-1970s to late 1990s



84) (2012), “Korea’s intellectual property rights system and its application to the phases of industrial development: Focusing on the patent system,” KIPO, KIIP, p. 26.

B. The Setting Period of Intellectual Property Law and Policy

(1) Paris Convention for the Protection of Industrial Property

As the world entered the 1970s, members of the Paris Convention for the Protection of Industrial Property established the WIPO and enacted the Patent Cooperation Treaty (PCT) and European Patent Convention (EPC). The internationalization and standardization of patent system were inevitable for all countries. Korea joined the WIPO in 1979 to follow the trend and joined the Paris Convention in 1980.⁸⁵⁾

The Korean Patent Act and system describe various high-level inventions in detail. Moreover, Korea has a multiple recording system for the scope of a request for a patent following the international trend to state the limits of the protection of rights clearly. In addition, a system on the laying-open of application was selected to prevent repetitive researches between companies and unnecessary dual investments by opening the inventions to the public. Furthermore, they implemented a request for examination system that would only examine requested applications to have a faster examination processing and expanded the national treatment and claim of priority between member nations. As for the trademark law, a collective mark and claim of priority systems were newly added.

(2) Joining the PCT

Following the local technological development promotion, needs for implementing and utilizing advanced foreign technologies, acquisition of stable market, and enhancement of international cooperation on industrial properties, inclusion in the Patent Cooperation Treaty (PCT) was requested. Therefore, the Korean government revised the Patent Act by modifying the qualification of application, documents for application, claim of priority period, release time of local application, and other regulations in 1982 before joining the PCT. Korea joined the PCT in 1984.⁸⁶⁾

To have a legal system to actively prepare for the WTO system by reflecting the WTO/TRIPS agreement contents that were settled on December 15, 1993, patent, utility model, and trademark laws were revised in 1995. The Patent Act and system protection was enhanced by expanding the scope of patent implementation toward an offering for assigning or leasing of patented items. The scope also included material inventions that can be produced through nuclear transformations. Moreover, the rights of an applicant were to be protected early on by opening the application to the public even before one year and six months have passed after the application if the applicant wants to. The term of existence for a patent was revised from 15 years from the announcement date to 20 years

85) KIPO, Patent Act Revision Record

86) KIPO, Patent Act Revision Record

from the application date.⁸⁷⁾

In 1996, the new Patent Act, Computer Program Protection Act, and Customs Act were enforced. Protection of color, cover, character, form, and their combination, as well as protection of color trademark combinations were implemented to the trademark law in the same year. In 1997, the trademark law was revised to provide protection for 3-D marks registered inside Korea. The 3-D mark law and registration system of multiple classes by single application was implemented, but community trade mark, substantive examination system of trademark registration, and application for renewal as well as trademark removal notice were abolished.⁸⁸⁾

4. Late 1990s–Present

A. The Transition Period of the Korean Economy

The Asian financial crisis in November 1997 started with indiscriminate fund withdrawals from Korean banks by international creditors. The Bank of Korea provided an emergency funding from its foreign exchange reserves as Korean banks were not able to finance foreign currencies because of the withdrawals. However, it was beyond the funding to support the enormous capital requirements. The foreign exchange reserves depleted soon and as the Bank of Korea can no longer protect its foreign exchange rate, this resulted in an extreme devaluation of exchange rate.

When this currency crisis led to instability of business and finance, the Korean economy faced an overall economic crisis. The Korean government reacted to the crisis with tightening policies in currency and fiscal areas in a macro-economic term. This means that the Korean government tried to expand its foreign exchange reserves and suppress rapid exchange rate devaluation by constricting the total demand of Korea. The issued interest rate of corporate bonds was previously at 12%, but it increased to 40% at the end of 1997 via the retrenchment policy.⁸⁹⁾

The Korean government focused on local factors and went through extreme financial restructuring and financial system improvement. The financial reform law was implemented in 1997 and proceeded with expelling insolvent financial institutions and restructuring. Meanwhile, concrete policies were prepared, such as strengthening prudential regulations and additional legislations on finances. The Korean government organized and improved a financial safety net to restructure finances for normalizing the financial system and prevent

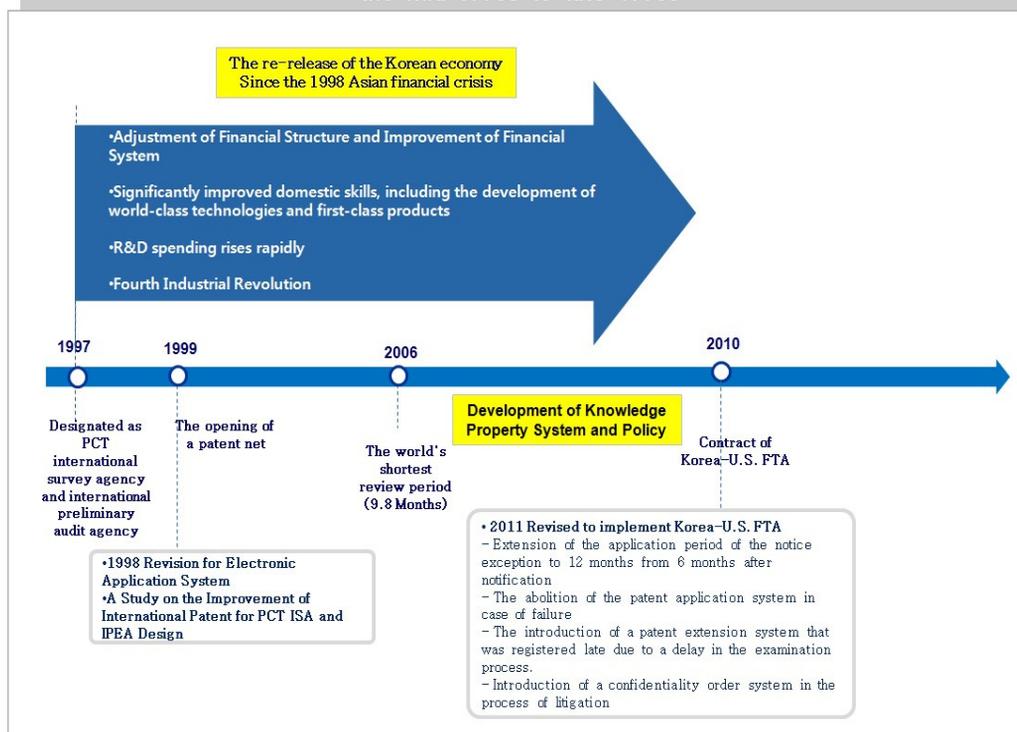
87) KIPO, Patent Act Revision Record.

88) Jo Mi-jin (2007), IPR related issues in Korea-China FTA, KIEP, p. 29.

89) Ko Young-sun (2008), The Growth of the Korean Economy and Role of the Government: Past, Present and Future, KDI, p. 280.

future foreign currency and financial crisis by organizing financial policies and insolvent financial institutions.

[Figure 2-4] The Korean economy and Intellectual Property Act and System in the mid-1970s to late 1990s



B. The Development Period of Intellectual Property Law and Policy

(1) Korea-US FTA Agreement

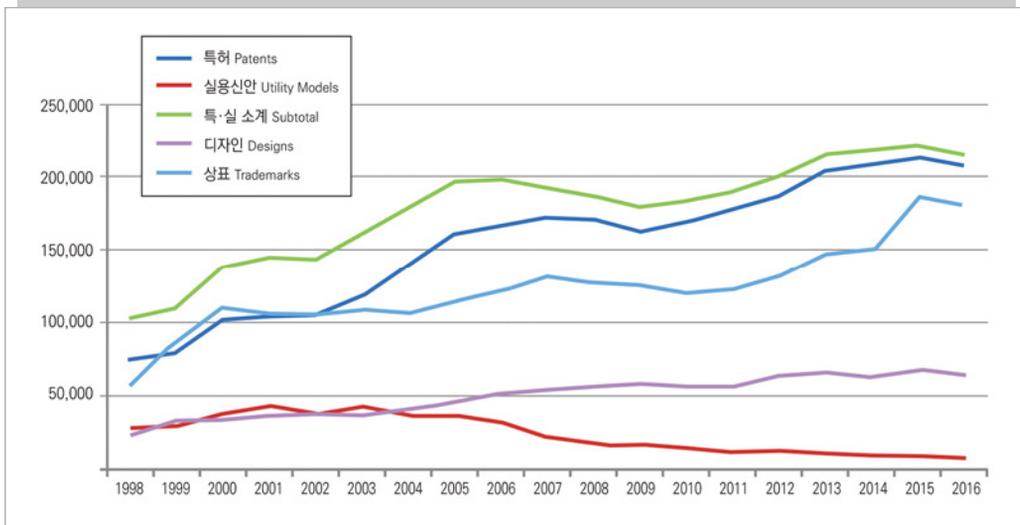
As the Korea-US FTA concluded successfully, the Intellectual Property Law, including the patent law, utility model law, and trademark law was revised in December 2011. In the case when an inventor spontaneously discloses an invention before its application, the law made an exception on this if the application rejection was within the application made in six months. This was revised to extend the acknowledgment of the exception period from 6 to 12 months, and abolish the patent rejection because of failure to work on patent inventions. In addition, a new system was implemented to extend the term of existence of a patent as much as a delayed time according to an applicant's request in case of delayed application of patent because of reasons other than the applicant's. In a patent infringement lawsuit, all submitted preparatory documents, including business secrets, was received through implementing a system of secrecy order. In case when the business secrets are opened to the public, the order may compel those who knows about the secrets not to use

them other than the purposes stated in the lawsuit that they are currently involved as doing so can possibly result in a business disruption.

The revision of trademark law includes sound and smell as parts of trademark scope and implements a certification mark system to deliver precise quality information about products. The revision also prevents a right of exclusive use to take effect by abolishing the right of exclusive use registration system. Furthermore, it organizes and clarifies the system by improving and complementing some inadequacies on the current system management as well as simplifying and dividing sentences that are too complex, long, or intertwined with other sentences to be understood. So far, a right of exclusive use among the rights to use trademarks had not been taking effect as it is not registered; the condition for this to take effect is to register it to the system. But the revision makes sure that the effect will take place even without the registration and enhances the protection of the owners of the right to use trademarks by changing the registration for requisites for counteraction against third parties.⁹⁰⁾

C. The Current Status of Intellectual Property Application and Registration

[Figure 2-5] Development of intellectual property application rates after the Asian financial crisis



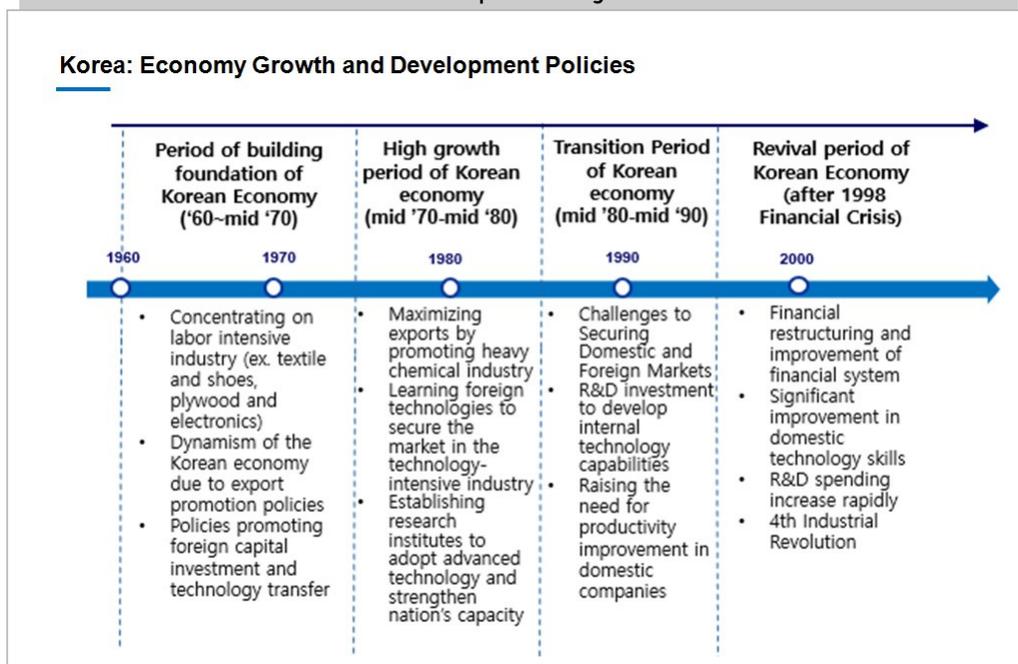
In 1998, right after the Asian financial crisis, 92,734 patent applications rapidly decreased to 75,188, but the number started to increase again to 80,624 in 1999 and recorded

90) http://patent100.com/gnuboard4/bbs/board.php?bo_table=news&wr_id=234. The Intellectual Property Act revision following the conclusion of the Korea-US FTA.

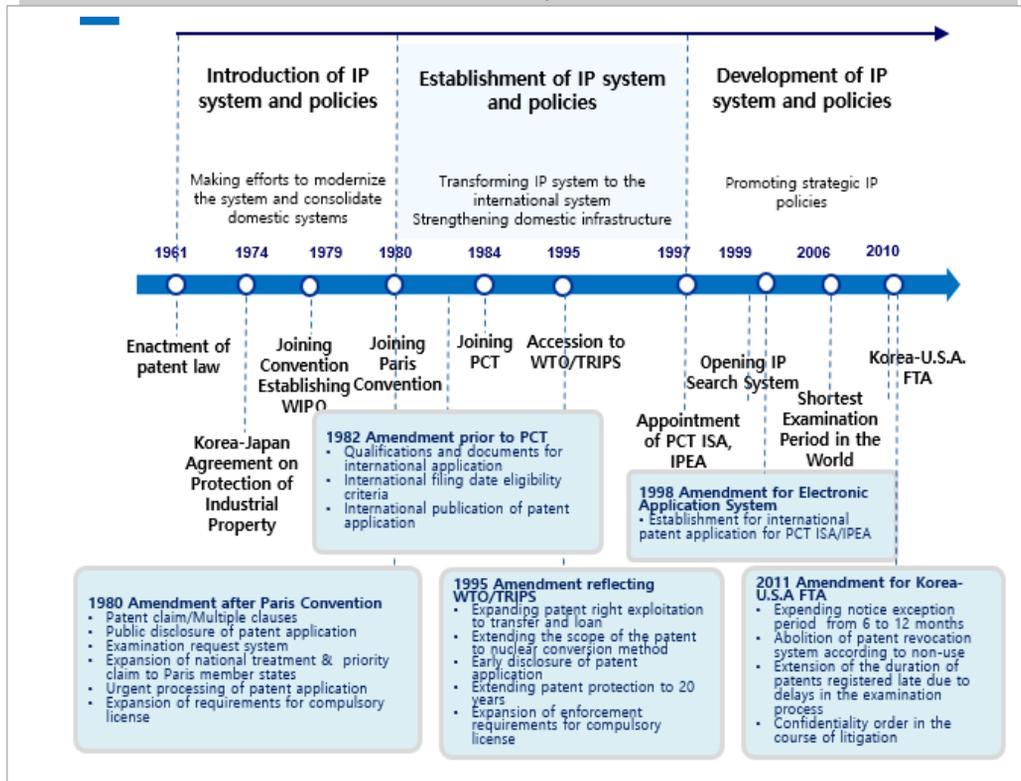
210,292 applications in 2014. In the early stage of the Korean economic development, the registration number of utility models was much higher than in patents, but there were 45,809 applications for utility models right before the crisis and this decreased to 28,896 applications in 1998. The number started to go up until 2001 and decrease again to a record of 9,184 applications in 2014. Trademark applications were also rapidly decreased to 57,393 in 1998, but the number increased after to 150,226 applications.

5. Summary of the Economic Development and the Intellectual Property Law and System Changes

[Figure 2-6] Change of Intellectual Property Act and policies following the economic development stages



[Figure 2-7] Change of Intellectual Property Act and policies following the joining in international agreements



Chapter 2. The Policy Research on Successful Policies in Commercializing an Invention

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 - B. Main Preceding Research
3. Policies Related to Intellectual Property Commercialization in Major Countries
 - A. Policies Related to Korea's Intellectual Property Commercialization
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 - A. The Current Status of Iran's Intellectual Property
 - B. Main Policies of Iran's Intellectual Property Commercialization
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 - [Strategy 1] Intellectual Property Resources Management
 - [Strategy 2] Building an Intellectual Property Finance and Support System
 - [Strategy 3] Building an Intellectual Property Commercialization Support System
 - [Strategy 4] Creating a Foundation for Intellectual Property Commercialization

1. Goal of Study and Main Contents

A. Goal of Study

The government of Iran established its main policy as job securement through economic stimulation and creation of new industries in the 6th plan. The policy priority of the plan is to create new markets and job positions via the intellectual property (patent, invention, and other IP) commercialization of universities and research institutes. However, with the rise in the quantity of research papers in Iran, there has been a shortage in the number of patent for commercialization. In addition, there was only slight IP commercialization outcomes, such as technology transfer and business start-ups, because of lack of funds. Furthermore, there are no manpower or specialized institute for IP commercialization along with lack of business knowledge for IP in the society.

This study will benchmark Korea's major policies that led to the successful IP commercialization cases and helped Iran to develop enabling policies to vitalize its IP commercialization.⁹¹⁾

B. Main Study Contents

This study recommends ways to vitalize IP commercialization for the government of Iran based on the major Korean policies for IP commercialization and analysis of foreign cases.

First, the study analyzes the current status and major policies of Korea's IP commercialization as well as major IP commercialization programs from other countries.

Second, it analyzes the current status of IP commercialization for developing Iran's IP policies and uses the SWOT analysis for the policy development.

Third, it implements Korea's technology commercialization promotion model to suggest enabling methods for IP vitalization for the government of Iran.

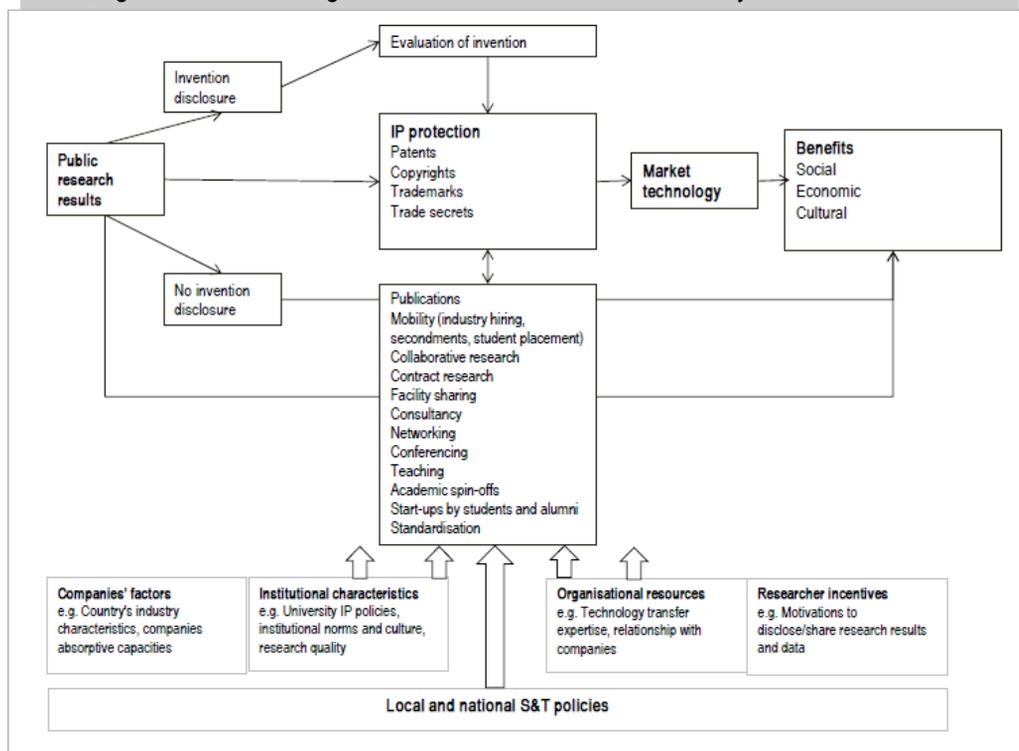
2. Intellectual Property Commercialization and Theoretical Background

A. Concept of Intellectual Property Commercialization

From public research outcomes to profit creation, the process of IP commercialization consists of acquiring research outcomes, claiming IP rights, entering markets, and creating profits. As the OECD (2013) suggested, understanding the characteristics of industry and policy along with intangible resources of organization and bringing in researchers are keys to the IP commercialization process. In the process from a researcher, intermediary, and company, the industry and related policy characteristics as well as capabilities and motivations of participants have a big influence on the success of commercialization. It is important to form an environment that will allow participants to engage into connected activities in the technology commercialization policy.

91) This report uses the term invention commercialization mixed with the term intellectual property commercialization

[Figure 2-8] Knowledge transfer and commercialization system (OECD 2013)



The IP commercialization process will vary depending on the characteristics of technology and industry. It can be broken down into technology development → commercialization → market entry. The technology development stage develops technologies based on the market demands (advanced planning and claiming IP rights are important) whereas the commercialization stage verifies the possibilities of market entry through manufacturing prototype, authentication, and other works. Lastly, production, marketing, and other business-centered management are the main tasks in the market entry stage.

Jolly (1995) explains IP commercialization as an activity that raises the value of technologies. Jolly highlights the importance of bridges that connect each stage of IP commercialization. Activities that increase the value of IP (idea → incubation → demonstration → promotion → continue) have both technological and marketing side activities. Each stage also aims to acquire resources needed to enter the next stage and resources used in the next stage.

Goldsmith (1995) divides IP commercialization into four stages and suggests technological development and marketing activities to raise possibilities of commercialization outcomes in each stage.

[Table 2-1] Goldsmith intellectual property commercialization model (reconstitution)

Stage	Stage Detail
Concept	Seize an opportunity to create economic values of IP in possession
Technology development	Shape developed patents in terms of technologies and market demands
Market entry	Implement IP into a commercialized form (technology transfer, business)
Market expansion	Global partnership activities for market expansion

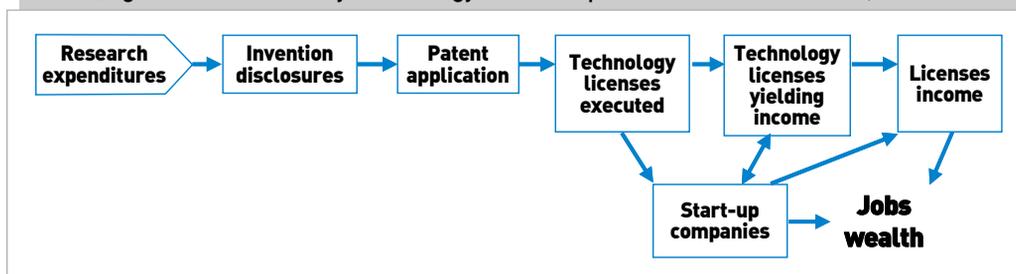
To commercialize IP, a target market of acquired IP must be found and additional R&D as well as marketing activities are necessary for the market (businesses) by collecting and processing their information. To achieve IP commercialization, patent rights that reflect the market demand must be acquired first. The patent must have technological differences and superiority of rights. Moreover, the competent patent should be proven effective in terms of business management. Once the patent is acquired, various forms of support are required for later production and services. It also requires policy support to achieve economy of scale in mass production.

B. Main Preceding Research

The United Nations Conference on Trade and Development (UNCTAD, 1971) defines technology transfer as transfer of technological knowledge elements that are normally required on designs or process controls for new production facilities and expansion of the currently operating facilities from the perspective of nation, company, individual, and other subjects of the transfer. Forster (1971) classifies perpendicular and parallel technology transfers in the perspective of technology flows. The perpendicular technology transfer is the transfer of technology in basic research → application research → developmental research → commercialization. The parallel transfer is the transfer between programs, organizations, industries, and countries.

Friedman and Silberman (2003) focus on public research institutes to define the process of technology transfer. They define technology transfer as the process where the IP (patents) of public research institutes (university) are transferred to profit-making organizations as companies to be commercialized.

[Figure 2-9] University technology transfer process (Friedman et al., 2003)



Bozeman (2000) states that the clear definition of technology transfer is difficult to make because of distinct definitions of technology transfer in different areas. Bozeman defines that the transfer of expertise or knowledge from one organization to another (Roessner, 2000) is technology transfer. Bozeman suggests five elements of the technology transfer process: transfer agent, transfer object, transfer medium, transfer recipient, and demand environment.

3. Policies Related to Intellectual Property Commercialization in Major Countries

A. Policies Related to Korea's Intellectual Property Commercialization

Intellectual property commercialization is the development, production, or sale of products using patent technologies. It also refers to technological development, IP implementation, transfer or creation of economic values through licenses in the process. The IP policies are crucial as their goals are to raise investments, create jobs, and, ultimately, achieve economic development.

The "Technology Transfer and Commercialization Promotion Act" is the representative law that defines Korea's IP commercialization. This law has a goal of transferring IP (patents, utility models) developed in public research institutes to companies for vitalizing commercialization. There are other related laws such as the "Framework Act on Intellectual Property," "Invention Promotion Act," and "Patent Act."

[Table 2-2] Korea's intellectual property commercialization-related laws

Law	IP Commercialization Contents	Department
Framework Act on Intellectual Property	Connection of R&D and IP development Promotion of IP use Provide IP information	Presidential Committee on Intellectual Property
Technology Transfer and Commercialization Promotion Act	Establish IP commercialization promotion plan Establish a foundation for technology commercialization (technology financing, valuation, etc.)	Ministry of Trade, Industry and Energy
Invention Promotion Act	Recommend outstanding inventions and promote their commercialization Designate examination agency Support outstanding invention commercialization, etc.	KIPO
Patent Act	Regulations on patent transfer and share	KIPO

The basic law for IP commercialization of Korea is the “Technology Transfer and Commercialization Promotion Act (Technology Transfer Act, Act No. 12844).” The purpose of establishment for this law is to promote transfer and commercialization of technologies developed in the public research institutes to private sectors. Moreover, it meant to promote smooth business, transfer, and commercialization of technologies developed in private sectors. The regulatory commercialization basis and promotion systems, include the commercialization coordinator, technology transfer agent, land donation, and technology holding company, along with technological finance systems such as asset securitization and technological security loan as well as valuation model, technological trust management services, and other systems.

[Table 2-3] Main contents of the Technology Transfer Commercialization Promotion Act

Contents	Detail
Base Expansion of Technology Transfer Commercialization (Chapter 3)	<ul style="list-style-type: none"> • Registration, offering, and fact finding of technology transfer and commercialization information • Designating, cancelling, and supporting technology transfer agent • Installation and supporting technology transfer organization of public research institute • Defining, designating, cancelling commercialization coordinator • Raising and supporting technology transfer and commercialization experts such as technology transfer agent
Promotion of Technology Transfer Commercialization (Chapter 4)	<ul style="list-style-type: none"> • Proceeding with the promotion of technology transfer and commercialization as well as international technology transfer and commercialization • Supporting the technology transfer and commercialization of local governments • Technology transfer and commercialization of private technologies as well as establishment and operation of technology holding companies • Preparing public research development outcome belonging, policies for public technology transfer, and commercialization promotion, etc.
Financial Support on Technology Transfer and Commercialization (Chapter 5)	<ul style="list-style-type: none"> • Technological security loan • Loan, transfer, and use of national properties with and without consideration • Transfer of national IP and other properties without consideration
Technological Trust Management Services (2, Chapter 6)	<ul style="list-style-type: none"> • Methods of technological trust • Designating, supervising, and other works on management institutes

This law is the Korean version of Bayh-Dole Act that focuses on vitalizing research outcomes and technology transaction of public research institutes such as universities and government-funded research institutes. By doing so, it hugely contributed to raising awareness and infrastructure expansion for technology transfer and transaction of public research institutes. Later, the law was revised to follow the changing times.

[Table 2-4] Revised contents of the Technology Transfer Commercialization Promotion Act

Revision Date	Main Contents
2006	<ul style="list-style-type: none"> • Revision of all to the Technology Transfer Commercialization Promotion Act (Act No. 8108) • Promotion of international cooperation, proceeding technology flow promotion • Suggestion about the commercialization promotion methods for technological finance and evaluation
2008	<ul style="list-style-type: none"> • Adding contents of patent trust management permission, duties of trust management organizations, etc.
2010	<ul style="list-style-type: none"> • Preparing the establishment, operation, and support basis of public research institute technology holding companies and mutual investment companies • Implementing the IP commercialization coordinator designating system and national investment default system

Recently, the Korean government established the 5th Technology Transfer and Commercialization Promotion Act (April 2014.4), which mainly focuses on vitalizing technology transaction market (implementing IP commercialization voucher system, technology banks), improving marketing capabilities of technology transfer and commercialization-related organizations (establishing co-technology holding companies of government-funded research institutes, reforming TLO), and enhancing commercialization financial support to make sure that private and public R&D outcomes reach the companies fully well.

The records until the 4th plan advancement announced by the Ministry of Trade, Industry and Energy show that the number of technology transfer charge departments was 158 in 2009 but this increased to 172 in 2012. In the same period, the charge personnel increased from 2.97 to 3.52, and the number of technology transfer has increased twofold, from 3,468 to 6,676 cases. Together with the previous cases, the engineering fee income increased from 101.7 to 165.2 billion. After exerting efforts to establish the technology transfer commercialization basis and charge departments and securing the personnel in charge, the IP commercialization outcome of public research institutes is rising.

[Table 2-5] Main contents of technology transfer and commercialization promotion plan

Year	Policy Direction	Main Contents
First (2001–2005)	Vitalizing technology transaction and market coordination	Vitalizing technology transfer market and system maintenance Expanding technology transaction and commercialization promotion basis
Second (2006–2008)	Expanding technology transfer and commercialization basis	Promoting public technology transfer commercialization Expanding technology evaluation system/technology financing
Third (2009–2011)	Raising technology-based global companies	Developing and managing technological resources Supplying technological finance by stage Supporting the global market entrance
Fourth (2012–2014)	Marketability of technology transfer commercialization	Enhancing the connected activities of technology and market Improving the capabilities of IP commercialization performing agents Advancing the market mechanism operating infrastructure
Fifth (2015–2017)	Creating technology transfer and commercialization ecosystem	Facilitating technology transaction market operations Improving technology marketing capabilities of public research institutes Supplying tailored technologies that have high possibilities of commercialization Preparing the growth conditions of early commercialization companies

There are other laws on designating research and development special zones, raising venture companies, promoting industrial training, and promoting cooperation of industry, university, and institute that are related to technology transfer and IP commercialization, which are implemented by the Ministry of Science and ICT, Ministry of SMEs and Startups, as well as Ministry of Education. These laws become the basis for establishment and operation of institutes that take special roles on IP commercialization such as research and development special zones and technology holding companies.

[Table 2-6] Laws on other technology transfer and commercialization

Law	Department	Main Contents
Special Act on Promotion of Special Research and Development Zones	Ministry of Science and ICT	Building commercialization basis of research development in special zones (technology transfer, commercialization)
Act on Special Measures for the Promotion of Venture Businesses	Ministry of SMEs and Startups	New technology start-up companies
Promotion of Industrial Education and Industry-Academic Cooperation Act	Ministry of Education	Industry, university, and institute cooperation technology holding companies

The Invention Promotion Act states the minimum legal basis required for commercialization such as referral of transfer of outstanding inventions and facilitation of commercialization of such inventions (item 3, paragraph 2, article 3), designation of institution for evaluation of inventions (article 28), assistance in the commercialization of outstanding inventions (article 32), and referral of a center for commercialization of patent technology (article 34).

In the case of the Framework Act on Intellectual Property, it states the legal basis for IP commercialization basic policy such as connection of research and development with the creation of intellectual property (article 17), promotion of utilization of intellectual property (article 25) and collection, and analysis and provision of information on intellectual property (article 31).

The IP commercialization support policy of Korea can be classified into commercialization technological development support, technology transfer and transaction support, establishment of technology commercialization basis support, and financial support.

The technological development support for commercialization can be classified into application and additional technological development for commercialization of developed technology (patent), manufacturing prototype, and programs that support follow-up R&D of technology to transfer. The major programs include the upgrade technology transfer program of the Ministry of Science and ICT, R&BD of the Ministry of Trade, Industry and Energy, and SME convergence technology development program of the Ministry of SMEs and Startups.

Technology transfer and transaction support types support technology development and planning process, transfer and transaction process, technology evaluation, and other activities for transferring developed technologies. For major programs, there are the basic

research outcome use support program of the Ministry of Science and ICT, and the SME R&D projects support program of the Ministry of Trade, Industry and Energy as well as Ministry of SMEs and Startups. In addition, there is the developed technology commercialization consulting program/contents valuation program of the Ministry of Culture, Sports and Tourism.

To achieve IP commercialization, other than direct processes such as technology development, there are outside supports, including the basis formation for IP commercialization. These supports are raising experts of IP commercialization, supporting organization capacity building, and forming an expert network. The main example is the industry, university, and institute collaboration and vitalization of the Ministry of Science and ICT and Ministry of Education (school support programs).

On the institutional efforts for IP commercialization, the Korean government also supports government-led fund creation, fund investment, and loan to appropriate resources that would be used on IP commercialization. They include the new growth engine fund creation program of the Ministry of Trade, Industry and Energy. Other supports are technology IP management programs, including an IP consulting related to the technology of KIPO and technology packaging.

B. Policies Related to Intellectual Property Commercialization of KIPO

KIPO is running various support programs such as building IP infrastructure, vitalizing IP transaction, and IP valuation to give rights to universities and public research institutes that resulted in outstanding research outcomes as well as promote transfer and commercialization in industries. KIPO proceeds with programs that dispatch patent management experts to support IP infrastructure building and capability strengthening in universities and public research institutes. It also proceeds with invention interviewing and public IP utilizing programs to prevent promising patent technologies from expiring. Moreover, it proceeds with programs with patent portfolio building through product programs that develop patents needed by companies in various research institutes, builds a portfolio of those patents, and transfers them to companies. Furthermore, KIPO operates the IP utilization network (IPPLUG) that allows information exchanges between IP consumers (companies)-suppliers (research institutes)-intermediaries (technology transaction agents) for vitalizing IP transactions. This forms the basis of developing outstanding patents and their utilization.

(1) Patent Management Expert Dispatching Program

Companies dispatch patent management experts with extensive IP experience to research institutes. They are hired for regulation arrangement, standardization of patent application process, building patent management system, consulting about IP, and raising

awareness capability on IP through technology transfer activities. In 2016, 12 patent management experts were dispatched to public research institutes to achieve 806 cases of IP consultation, 173 cases of seminar and briefing, 685 cases of technology transfer, as well as KRW 21.016 million for technology transfer training fee.

(2) Invention Interview and Public IP Utilization Support Programs

This program supports universities and public research institutes in selecting promising patent technologies before patent application. Experts from the outside of invention stage technologies that have been hired before the patent application stages (IP experts, technology experts, market experts) participate and provide invention consultation and makeup lessons to support the development of outstanding inventions. The invention interview program considered 3,941 reported inventions through supports from 30 research institutes in 2016 and determined invention ratings (S, A, and other invention ratings) on 3,506 cases.

[Table 2-7] 2016 Invention interview support records

Organizations	Invention Rating						Non-succession
	Total	S	A	B	C	D	
30 Organizations	3,506 cases	184 cases	953 cases	1708 cases	456 cases	205 cases	435 cases
	100%	5.3%	27.2%	48.7%	13%	5.8%	

Finding the companies in need of inventions and technology marketing support are being done by developing patents owned by public research institutes through public IP utilization supports. In 2016, 30 cases were selected as commercialization strategy support tasks and they were supported through patent reinforcement, SMK, and technology marketing to make sure that patents of public research institutes can be transferred to business areas. A total of 55 cases and KRW 10.305 billion of technology transfer outcomes were achieved.

(3) Intellectual Property Utilization Network Operation

KIPO is operating the IP utilization network (IPPLUG) to make sure that companies and technology consumers are supplied with the necessary patent technologies. The IPPLUG is a network where consumers (company), suppliers (public research institute), and investors (venture capital, bank) are gathered together to listen to technology difficulties, share information, and connect information that the companies require.

[Table 2-8] Network procedure

Network procedure	Main contents
Finding a company in need	Local TP, local government, related association, etc.
↓	
Matching a patent supplier	Developing an IP that reflects the need of the company
↓	
Preliminary meeting with the company in need	Confirming the companies that would participate in the exchange event
↓	
IPPLUG exchange event	Company-research institute-intermediary exchange
↓	
Meeting with the company in need	Meeting for IP transaction
↓	
IP transaction	Technology transfer
↓	
Connect to a financial institution	Follow up supports connected with investment organizations

[Table 2-9] University and public research institute intellectual property strengthening support program

Type	Contents
Invention interview public IP utilization support	<ul style="list-style-type: none"> • (Program outline) Supporting public research institutes to create IP through invention interviews before patent application (invention review program) and enable them to select and commercialize promising patent technologies that can be used in industries • (Support target) University and public research institute • (Support scale) KRW 1.3 billion (30 institutions) • (Support contents) Operating invention interviews and supporting IP utilization • (Invention support interview) Inducing technology transfer and commercialization by creating promising IP through reviews and evaluations of experts from inside and outside before application of invention • (Stage 2) Assessing tasks that require technology transfer supports among promising technologies that were developed through invention interviews and supporting them with commercialization strategies and technology marketing
	<div style="text-align: center;"> <pre> graph LR A[Invention] --> B[Invention interview] B --> C[IP creation] C --> D[IP utilization] </pre> </div>

[Table 2-9] Continued

Type	Contents
Building product portfolios	<ul style="list-style-type: none"> • (Program outline) Building product portfolios for patent technologies in similar areas that are owned by universities and public research institutes separately for easy use in the industries and supporting them on transfer and commercialization in the industries • (Support target) University and public research institute • (Support scale) KRW 1.4 billion (supporting 24 tasks) • (Support contents) Three supporting types • (Technology marketing support) Marketing supports such as developing patent transfer strategies by product • (Verification support) Verifying the possibility of patent commercialization (examination, certification) • (Design support) Supporting consulting expenses such as design development
Government R&D patent design support	<ul style="list-style-type: none"> • (Program outline) Supporting IP creation that reflects the market demands of universities and public research institutes • (Support target) University and public research institute • (Support scale) KRW 3.3 billion • (Support contents) Designing the optimized scope of rights and acquiring rights locally and abroad through comprehensive evaluations on invention (about rights, technologies, marketability) • (Application strategy) Reinforcing rights, establishing foreign application strategies • (Invention reinforcement) Reinforcing the scope of patent claims • (Patent application) Supporting patent application locally and abroad
Dispatch patent management experts	<ul style="list-style-type: none"> • (Program outline) Improving the performance of IP managing departments by hiring patent management experts in public research institutes • (Support target) University and public research institute • (Support scale) KRW 60 million per institution (support for 3 years) • (Support contents) Supporting the personnel expenses of patent management experts

[Table 2-10] IP transaction support program

Type	Contents																			
<p>NTB National Tech-Bank</p>	<ul style="list-style-type: none"> • (Contents) The online integrated information network that supports the connection of patents owned by companies and public research institutes to commercialization • (Support target) Patents owned by companies and public research institutes • (Support contents) Built to enable technology transfer and evaluation online • (URL) www.ntb.kr • (Holding technology) 164,132 technologies  <p>The screenshot shows the NTB National Tech-Bank website. At the top, there is a navigation bar with the NTB logo and several menu items: '기술이전/사업화정보', '기술사업화동향', 'NTB 네트워크', 'NTB 기술이전설명회', '기술평가', and '기술사업화지원/연계'. Below the navigation bar, there is a main heading: '❶ [전기·전자] 2차원 디지털 이미지 기반의 3차원 디지털 이미지 오브젝트 자동 추출 시스템 및 추출 방법'. Underneath, there is a table with the following content:</p> <table border="1"> <tr> <td>산업기술분류</td> <td>전기·전자 > 가전용기기 및 전자용용기기 > 정보가전기기</td> </tr> <tr> <td>과학기술분류</td> <td>전기·전자 > 전기 응용 기술 > 기타 전기 응용 기술</td> </tr> <tr> <td>응용분야</td> <td>디지털 이미지 오브젝트</td> </tr> <tr> <td>기술개발상태</td> <td>독허만신청(등록)</td> </tr> <tr> <td>희망이전유형</td> <td>라이선스,</td> </tr> <tr> <td>판매처 정보</td> <td> <table border="1"> <tr> <td> 회사명 가톨릭대학교</td> <td> 담당자 임태혁</td> <td> 연락처 010-947-3</td> </tr> </table> </td> </tr> <tr> <td>NTB 기술코드</td> <td>S2018001072</td> </tr> <tr> <td>키워드</td> <td>2D, 3차원, 디지털, 이미지, 카메라</td> </tr> </table>	산업기술분류	전기·전자 > 가전용기기 및 전자용용기기 > 정보가전기기	과학기술분류	전기·전자 > 전기 응용 기술 > 기타 전기 응용 기술	응용분야	디지털 이미지 오브젝트	기술개발상태	독허만신청(등록)	희망이전유형	라이선스,	판매처 정보	<table border="1"> <tr> <td> 회사명 가톨릭대학교</td> <td> 담당자 임태혁</td> <td> 연락처 010-947-3</td> </tr> </table>	 회사명 가톨릭대학교	 담당자 임태혁	 연락처 010-947-3	NTB 기술코드	S2018001072	키워드	2D, 3차원, 디지털, 이미지, 카메라
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응용분야	디지털 이미지 오브젝트																			
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<p>IP Utilization Network IPPLUG</p>	<ul style="list-style-type: none"> • (Contents) Sharing information of consumers (companies), suppliers (universities/public research institutes), intermediaries (transaction organizations, technology transfer agents), investors (financial, investment organizations), and other details needed, as well as personnel exchanges for patent transaction • (Support contents) Explaining and consulting about patents owned by public research institutes to consumer companies • (URL) www.ipmarket.or.kr • (Holding technology) 164,132 technologies  <p>The screenshot shows the IP-PLUG website. At the top, there is a navigation bar with the IP-PLUG logo and several menu items: 'IP-PLUG 소개', '구매기술', '판매기술', '행사안내', '행사사진', and '자료실'. Below the navigation bar, there is a main heading: 'IP-PLUG 소개 구매기술 판매기술 행사안내 행사사진 자료실'. Underneath, there is a table with the following content:</p> <table border="1"> <tr> <td>[바이오 특허] 벤조사이아졸을 표면에 결합시켜 진단과 치료 효과를 동시에 나타내고 물에 용해성이 뛰어난 가솔리놀 나노입자...</td> </tr> <tr> <td>본 발명은 벤조사이아졸을 표면에 결합시켜 진단과 치료 효과를 동시에 나타내고 물에 용해성이 뛰어난 가솔리놀 나노입자 및 이의 제조 방법에 관한 것으로, 보다 상세하게는 살리카 코팅층을 가지는 자성체 코어에 DO3A-BTA가 공유결합 되어 있는 자성 나노입자 및 이의 제조 방법에 관한 것이다.</td> </tr> <tr> <td>등록일: 2017.06.02 조회: 97</td> </tr> <tr> <td>[바이오 특허] 페로센을 기반으로 한 새로운 형태의 MR 조영제의 개발</td> </tr> <tr> <td>본 발명은 페로센을 기반으로 한 새로운 형태의 MR 조영제의 개발에 관한 것으로, 보다 상세하게는 DO3A-페로센 복합물, 이 복합물을 리간드로 포함하는 가솔리놀 착물, 이 가솔리놀 착물을 포함하는 MRI 조영제, 및 이들의 제조 방법에 관한 것이다.</td> </tr> <tr> <td>등록일: 2017.06.02 조회: 80</td> </tr> </table>	[바이오 특허] 벤조사이아졸을 표면에 결합시켜 진단과 치료 효과를 동시에 나타내고 물에 용해성이 뛰어난 가솔리놀 나노입자...	본 발명은 벤조사이아졸을 표면에 결합시켜 진단과 치료 효과를 동시에 나타내고 물에 용해성이 뛰어난 가솔리놀 나노입자 및 이의 제조 방법에 관한 것으로, 보다 상세하게는 살리카 코팅층을 가지는 자성체 코어에 DO3A-BTA가 공유결합 되어 있는 자성 나노입자 및 이의 제조 방법에 관한 것이다.	등록일: 2017.06.02 조회: 97	[바이오 특허] 페로센을 기반으로 한 새로운 형태의 MR 조영제의 개발	본 발명은 페로센을 기반으로 한 새로운 형태의 MR 조영제의 개발에 관한 것으로, 보다 상세하게는 DO3A-페로센 복합물, 이 복합물을 리간드로 포함하는 가솔리놀 착물, 이 가솔리놀 착물을 포함하는 MRI 조영제, 및 이들의 제조 방법에 관한 것이다.	등록일: 2017.06.02 조회: 80													
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(4) Intellectual Property Valuation and Financial Support

KIPO designates and operates an invention evaluating organization to invigorate IP transaction. Through this, KIPO is supporting patent technology evaluation for commercialization and financial connection to make sure that IP valuations can be used in technology transaction and transfer.

In case of the patent technology evaluation support, KIPO provides up to KRW 50 million per applicant annually, which is within 70% of the evaluation cost. The applicants are SMEs that hold registered patent and utility model. KIPO supported 84 patent technology evaluations in 2016. In addition, KRW 746.1 billion had been supported to SMEs from the financial sector through the patent evaluation support from 2013 to 2016.

Based on the Invention Promotion Act, KIPO currently designates and operates organizations that evaluate technologies and business values as the invention evaluating organizations through national and public research institutes as well as government-funded and private research centers. Currently, there are 13 invention evaluating organizations designated and operated by KIPO.

The change and results of Korea's technology transfer commercialization policy are the outcomes of consistent policy execution through reflecting social environment changes that happened for 17 years after the enactment of the Technology Transfer and Commercialization Promotion Act in 2001. Especially, the private sector of Korea invested KRW 52.349 trillion (76%) and the government of Korea invested KRW 16.41 trillion (24%) as the R&D cost as of 2016, to develop the seeds of technology necessary for technology commercialization. The public research institutes used KRW 9.1 trillion (13%) and universities used KRW 6.2 trillion (9.1%) from the R&D cost. Based on such investments toward R&D, 32,491 new technologies were developed in 2016 and 21,120 from these cases were patented. However, there are huge gaps between the commercialization systems between Korea and Iran to implement the Korean model in the Iranian market.

Korea's R&D investment is 4.29% of the GDP (2014) and it is the highest percentage in the world. Considering the economic situation of Iran, a large investment like Korea is not recommended. Therefore, Iran must have a strategic approach by selecting areas to focus its R&D investments to use the limited budget efficiently. For the Iranian government to have a successful IP commercialization policy, first they must establish a mid- to long-term R&D and IP commercialization strategies that are related to each other. The government must also expand its R&D investment that can create seeds required for commercialization and build a virtuous cycle of developed technologies and their use by companies. So, a governmental mid- to long-term technology commercialization strategy that is connected to R&D investment, global commercialization experts, and SME promotion policies must be established and executed in stages.

[Table 2-11] IP valuation program

Type	Contents												
IP secured loan	<ul style="list-style-type: none"> • (Contents) Supporting evaluation costs to allow financing with holding IP as security through IP valuation owned by companies • (Support target) SMEs that own registered patents • (Support contents) Supporting KRW 5 million evaluation cost • (Support stage) Patent-secured loan of banks in agreement with the IP evaluation by evaluation agency <ul style="list-style-type: none"> - (Stage 1) IP valuation is performed by the designated evaluation agency - (Stage 2) Patent secured loan from a bank in agreement 												
	<table border="1"> <thead> <tr> <th>Register IP Valuation</th> <th>Bank in Agreement</th> </tr> </thead> <tbody> <tr> <td>Send an IP valuation request</td> <td>Bank in agreement → Evaluation agency</td> </tr> <tr> <td>Consult evaluation</td> <td>Evaluation agency ↔ Applicant</td> </tr> <tr> <td>IP valuation</td> <td>Evaluation agency</td> </tr> <tr> <td>Support evaluation cost</td> <td>KIPO</td> </tr> <tr> <td>Loan decision</td> <td>Bank in agreement</td> </tr> </tbody> </table>	Register IP Valuation	Bank in Agreement	Send an IP valuation request	Bank in agreement → Evaluation agency	Consult evaluation	Evaluation agency ↔ Applicant	IP valuation	Evaluation agency	Support evaluation cost	KIPO	Loan decision	Bank in agreement
	Register IP Valuation	Bank in Agreement											
	Send an IP valuation request	Bank in agreement → Evaluation agency											
	Consult evaluation	Evaluation agency ↔ Applicant											
	IP valuation	Evaluation agency											
	Support evaluation cost	KIPO											
Loan decision	Bank in agreement												
IP valuation	<ul style="list-style-type: none"> • (Contents) Supporting IP valuation costs for registered patents and utility models • (Support target) SMEs that own registered patents • (Support contents) Supporting valuation costs (KRW 50 million) • (Support stage) Applicants must go through the evaluation process from designated evaluation agencies <p>* 14 evaluation agencies (government designated)</p>												
	<table border="1"> <thead> <tr> <th>Register IP Valuation</th> <th>Online Registration</th> </tr> </thead> <tbody> <tr> <td>Consideration</td> <td>KIPA</td> </tr> <tr> <td>Evaluation</td> <td>Designated evaluation agency</td> </tr> <tr> <td>IP valuation</td> <td>Evaluation agency</td> </tr> <tr> <td>Support evaluation cost</td> <td>Invention Promotion Agency (KIPO)</td> </tr> </tbody> </table>	Register IP Valuation	Online Registration	Consideration	KIPA	Evaluation	Designated evaluation agency	IP valuation	Evaluation agency	Support evaluation cost	Invention Promotion Agency (KIPO)		
	Register IP Valuation	Online Registration											
	Consideration	KIPA											
	Evaluation	Designated evaluation agency											
IP valuation	Evaluation agency												
Support evaluation cost	Invention Promotion Agency (KIPO)												

C. The Current Status of Intellectual Property Commercialization of Major Countries

(1) The United States

To achieve economic growth through technological innovation, the US proceeds with the “Lab-to-Market” policy for invigorating technology transfer and commercialization of technological development outcomes (patents, technologies) owned by public research institutes. Most of their support on the commercialization of research outcomes are adding a commercialization program to the Department of Energy (DOE), Department of Defense (DOD), National Institutes of Health (NIH), and National Science Foundation (NSF), which place government-funded research orders for the most part.

The Federal Laboratory Consortium (FLC, www.federallabs.org) developed and operates the “Available Technologies Search Tool” that allows a search of over 20,000 technologies owned by federal facilities and national laboratories to promote IP commercialization activities.

[Table 2-12] Lab-to-Market Activities

Department	Lab-to-Market Activities
DOE	Supporting the National Incubator Initiative for Clean Energy (NIICE)
DOD	Supporting the Pracademic Center of Excellence in Technology Transfer; PACE/T2
NIH	Executing the Breast Cancer Startup Challenge
NSF	Training on the entrepreneurship for researchers through the Innovation Corps

The NSF operates the NSF Innovation Corps (I-Corps) program that provides training and consultation about technology commercialization to researchers who are funded by the NSF. I-Corps provides the “Lean Launchpad” training course, which was developed by Steve Blank, one of the Silicon Valley entrepreneurs and entrepreneurship instructor.

*Startup Principles of Lean Launchpad: ① distinguishing executable business model, ② confirming elements for business success through potential customers and partners, ③ time and cost reduction through prototype development and consumers’ initial reactions, and ④ acquiring clear evidence that assure success for venture investors.

The US government operates the Small Business Innovation Research (SBIR) as the representative program that induces SMEs’ technology development and support IP commercialization. The SBIR also supports technology development and commercialization as the federal government’s SME support R&D program. This program supports three stages for IP commercialization and decides on whether the commercialization should proceed to the next stage by reviewing promotion plans and outcomes in each stage.

*Stage 1: Reviewing technological feasibility, business possibility, and marketability → Stage 2: Technology development (IP) → Stage 3: Commercialization

[Table 2-13] SBIR procedure

Procedure	Main Contents
Stage 1 (Review feasibility, business possibility, marketability)	<Review technological feasibility of proposed task> <ul style="list-style-type: none"> • USD 150,000 or less per task (6 months) • A company matches 2/3 of the total research budget or more
Stage 2 (Technology development)	<Support technology development fund> <ul style="list-style-type: none"> • USD 1 million or less per task (2 years) • A company matches 1/2 of the total research budget or more
Stage 3 (Commercialization support)	Supporting the government purchase of developed products and development of applied products

The major start-up support strategy of the US is currently in operation by forming a system where company, university, foundation, and federal government cooperate by enhancing commercialization of the federal government R&D to create high-growth start-ups and new businesses.

[Table 2-14] Startup America initiative activities

Main Policy	Contents
Capital access expansion	<ul style="list-style-type: none"> • Assign USD 1 billion to SBA's "Impact Investment" and "Early Stage Innovative Investment" programs • Reduction of small enterprises' capital income taxes • Offering benefits of a total of USD 5 billion of tax reduction to small enterprises in low-income area
Mentoring	<ul style="list-style-type: none"> • The SBA and Department of Energy (DOE) are operating mentoring programs for more than 100 clean technology start-ups • Mentoring programs for military veterans to start high-growth start-ups
Network operation	<ul style="list-style-type: none"> • The "DC-to-VC" program where public officials, venture capitalists, and enterprisers meet

After 2010, the United States created 15.5 million jobs using the SAI programs. The accelerator programs were increased from 30 (2009) to 170 (2015), and the venture capital investment was increased to 200%.

The IP commercialization institutions are indirectly assisted by infrastructure-oriented supports.

[Table 2-15] Major intellectual property commercialization institutions

Support Institution	Main Contents
RTTC (Regional Tech Transfer Center)	Technology, market patent information support, and technical advice services
NTTC (National Tech Transfer Center)	Provide the government R&D-supported technology development information Support contract, negotiation training for technology evaluation and transaction
FLC (New energy and industrial technology development org)	Provide patent technology information of the federal laboratories
OTT (Office of Technology Transfer)	Proceed with transfer and commercialization of the American Agriculture Laboratory patent technology Build partnerships for vitalizing agriculture R&D

(2) Japan

The Japan Science and Technology Agency (JST) proceeds with various industry and academic cooperative programs to support technology transfer and commercialization of universities and public research institutes' IP. Most notably, there are A-STAR (adaptable seamless technology transfer program), S-Innovation (strategic program of innovation R&D), and other IP cooperation programs of industry and academic circles.

[Table 2-16] Major programs

Program	Main Contents
A-STEP	R&D where industry and academic circles cooperate based on an IP that universities own
S-Innovation	Technology development program co-operated by industry and academic circles (Stage 1: Basic, Stage 2: Element technology, Stage 3: Application development)

The Ministry of Education, Culture, Sports, Science and Technology (MEXT) of Japan proceeds with a new industry creation base program to work on IP commercialization by cooperating with private commercialization experts such as providing venture capitals from pre-startup period for patents that universities and research centers have. By operating a business promoter that is similar to the accelerator, they support the development of promising patents and commercialization activities. Moreover, the MEXT induces private investments using networks.

The Japan Patent Office (JPO) operates an IP advanced city support with local governments to vitalize the use of IP for local SMEs and venture companies. This program installs a patent office in each jurisdiction (nine areas) to operate the SME IP support policies that reflect local industrial characteristics.

In addition, the JPO proceeds with an “SME patent information analysis and utilization support program” that helps with IP commercialization of SMEs through a patent information analysis support that is usually too burdensome for SMEs. This program’s patent information analysis and utilization support divides supports in SME’s technology development, application, and evaluation request stages. In the technology development stage, the program supports the technology development strategy using patent information, whereas in the application stage, it supports the establishment of the patent application strategy to use IP. In the evaluation request stage, the program supports securing property through application-related patent information analysis.

The program supports IP management and strategy by dispatching an IP producer (managed by the Japan Institute for Promoting Invention and Innovation), which is the IP expert, to a research center where technology development is proceeded with public funds. The IP producer supports the establishment of a patent strategy that considers using outcomes from the early development stage to IP utilization. It also supports IP management.

The City of Yokohama in Japan executes a policy that lends money to SMEs confirmed with the “Yokohama intellectual property mirai company” for equipment funds and operating fund purposes with low interest rates. For operating funds, the loan amount is up to JPY 50 million (5 years), and for equipment funds, the amount is up to JPY 100 million (10 years). Other IP-related expense supports include IP consulting cost and pioneering the market using IP.

The Osaka Chamber of Commerce and Industry proceeds the MoTTo PLUS program together with the Yao Chamber of Commerce and Industry and Osaka City Shinkin Bank. This program supports SMEs to use patents that are not used by large companies to work on new businesses.

The IP commercialization institutions are divided into support organizations that are in technology development, finance, infrastructure support, manpower support, and other areas.

[Table 2-17] Major institutions on IP commercialization

Supporting Institution	Main Contents
TLO	<ul style="list-style-type: none"> • Supporting co-research between companies and universities • Raising technology transfer experts • Evaluation of university research technologies and transfer-related works
IPTJ (IP Trading Japan)	<ul style="list-style-type: none"> • Supporting IP Finances • Providing DB on technology information and unused IP as well as consultation • Intermediation of IP licenses
NEDO (New Energy and Industrial Technology Development Org)	<ul style="list-style-type: none"> • Supporting industry and energy environment technology developments • Raising technology experts
AIST	<ul style="list-style-type: none"> • Spreading technologies to markets by connecting research outcomes of university and public research institutes to the high-tech start-ups (HISU) • Connecting start-up advisors to researchers for business establishments after 2 years of technology developments and providing patent licenses (5 years) when businesses are established along with consultations

(3) The United Kingdom

The IP commercialization program of the UK operates with private institutions at the center. The representative programs are the KTN and SMART.

[Table 2-18] Major programs on IP commercialization

Program	Main Contents
KTN (Knowledge Transfer Network)	<ul style="list-style-type: none"> • Encouraging knowledge exchanges and cooperation between research institutes and companies <ul style="list-style-type: none"> - Gathering of main institutions that support company, university, research institute, financial organization, technology transfer, and commercialization in certain technology or business areas - The technology demands in the industries that were discussed and organized through the KTN are planned and proceeded as the UK government's demand-oriented R&D programs - Operating parallel with the online portal and offline meetings • The KTN is participated by 25 industry fields, around 4,000 companies, around 15,000 experts, and around 45,000 general members

[Table 2-18] Continued

Program	Main Contents
SMART award	<ul style="list-style-type: none"> • Supporting SMEs with 250 employees or less on finance, technology evaluation, and prototype manufacture • The proof of market program <ul style="list-style-type: none"> - Supporting the cost of GBP 5000–25,000 (maximum 60% of a development fund) to realize the commercialization of innovative ideas - Planning a business based on licensed IP or planning for companies in their early stage
KTP (Knowledge Transfer Partnership)	<ul style="list-style-type: none"> • Supporting technology transfer through industry, university, and institute collaboration, and building a network for expert cooperation

Various commercialization supporting institutions are in operation based on support policies and systems. The most representative institutions in private transactions are BTG, BIS, and other organizations.

[Table 2-19] Major institutions on IP commercialization

Institution	Main Contents
BIS	<ul style="list-style-type: none"> • Supporting IP commercialization of basic science researches
BTG	<ul style="list-style-type: none"> • Working on technology transfer of patents from universities and public research institutes including patent development and planning marketing strategy
BUSINESS LINK	<ul style="list-style-type: none"> • Supporting technology transfer commercialization, M&A intermediation, etc.
Oxford ISIS	<ul style="list-style-type: none"> • An international IP commercialization institute established within Oxford • Building a network for IP commercialization by opening overseas branches for global commercialization based on UK technologies

4. Developing Policies on Iran’s Intellectual Property Commercialization

A. The Current Status of Iran’s Intellectual Property

Iran has very low awareness on IP, that it takes the fourth place on the distribution countries for Chinese counterfeit products. This is because of the long-term economic sanction. After the economic sanction was lifted, the government of Iran is exerting efforts to improve the lagging IP system to attract investments of foreign companies to the local market.

As of 2016, Iran became the leading IP nation in the Middle East, taking the ninth place in global patent applications, 13th place in trademark application, and fifth place in design application. However, the patent registration rate is low at 22% (for local cases), and this is because of the lack of patent attorney system in Iran that would proxy the patent application. The inventors must fill out claims and prepare the examination for the Patent Office; therefore, there is low registration rate in Iran. In comparison with 2014, the application rate of foreigners had increased by 5.8 times and trademark, design, as well as other areas also showed a great increase in numbers. This shows that there are high expectations on the economic growth of the Iranian market.

Meanwhile, the number of application by foreigners is low but the registration rate is high. Companies from Germany, France, and some other European countries along with Japanese companies that entered Iran are acquiring patents. Therefore, companies must analyze the patents of major competitors in various fields when they enter the Iranian market in the future. Most of the patent applications of Iran are local oriented, which happened during the economic sanction period, but the number of foreign application is rising since it joined the PCT in 2013.

[Table 2-20] The current status of IP application and registration in Iran (2010–2016, reconstitution of the WIPO data)

Types		2010		2011		2012		2013		2014		2016	
		Local	Foreigner	Local	Foreigner	Local	Foreigner	Local	Foreigner	Local	Foreigner	Local	Foreigner
Patent	Application	11,725	528	12,131	489	11,132	432	11,681	338	13,887	119	14,930	702
	Registration	5,389	260	5,177	309	5,711	454	3,519	103	3,103	180	3,111	157
Trade mark	Application	21,597		32,943		30,230		40,338		-		57,023	
	Registration	13,158		14,988		15,106		10,848		-		28,289	
Design	Application	3,836		4,297		3,790		4,830		8,923		15,979	
	Registration	2,345		1,949		1,550		19,310		3,270		5,126	

[Table 2-21] PCT and Madrid applications of Iran

Application	2010	2011	2012	2013	2014	2015	2016
PCT application	6	1	2	4	35	71	63
Madrid application	34	16	23	38	27	44	39

Source: WIPO Statistics Database (2017)

The global competitiveness of Iran is all different in investigation reports, but the country is in 69th to 75th place in the world. Iran is 107th place in the protection of IP and 126th place in the protection of inventors, which are very low worldwide. These are because of the shrinkage of investment during the economic sanction that led to insufficient activities on technological innovation and low level of IP protection in the overall Iranian society because of economic activities through cheap counterfeit products from countries like China.

To promote a knowledge-based society and venture companies in Iran, the protection of IP must be enhanced and policies and awareness to protect inventors must be strengthened.

[Table 2-22] The Global Competitiveness Index ranks in 2017-2018

Report	RANK	Main Contents
Global Competitiveness Index (World Economic Forum)	69	<ul style="list-style-type: none"> • Intellectual property protection (107) • Strength of inventor protection (126) • PCT patents(84)
Global Innovation Index (WIPO)	75	<ul style="list-style-type: none"> • Human capital and research (45) • Tertiary education (3) • Graduates in science and engineering (2) • Knowledge creation (47) • Patents by origin/bn PPP\$ GDP (12) • PCT patent applications/bn PPP\$ GDP (85) • Utility models by origin/bn PPP\$ GDP (N/A) • Scientific and technical articles/bn PPP\$ GDP (35) • Citable documents H index (41) • Knowledge diffusion (121)

Recently, Iran promoted the foreign investments in the 6th 5-year plan of economic and social development (2016-2021) and improved the social systems to build the local market

economy. Moreover, Iran proceeds with the development of industry by applying new technologies in the next generation strategic industries (oil, gas, petro-chemistry, transportation, advanced material, construction, ICT, aerospace, marine, etc.). To promote the industries through developing new technologies, an institutional maintenance that would protect them is necessary.

B. Main Policies of Iran's Intellectual Property Commercialization

(1) Main Policy Trend

The government of Iran is proceeding with the 6th 5-year plan of economic and social development from 2016 to 2021. This plan constitutes three main pillars of flexible economic development, “advancement of science and technology,” as well as “promotion of cultural excellence.” Especially, the priorities of economy are achieving 8% annual economic growth, national enterprise, financial and banking areas, and lastly, reforming the distribution and management of resource imports. In the 6th plan, the priorities are oil, gas, petro-chemistry, transportation, advanced material, construction, ICT, aerospace, marine, agriculture, and water.

To realize the 6th development plan, Iran constantly improves business environments and market competition structure, breaks away from overdependency on oil by promoting economic independency, as well as promotes activities of private companies. Through such policy actions, the business structure of Iran is expected to be changed into B2B from conventional G2G and B2G (Samjong KPMG). Considering one of the goals that were constantly suggested in the development plan of Iran was privatization and the financial status of the Iranian government has been weakened because of the long-term sanction, the role of private companies in the future economy of Iran will expand. Recently, the government of Iran followed the trend and privatized around 860 national enterprises. The government would like to raise the global competitiveness of the Iranian companies by vitalizing the participation of private companies in the economy.

Even during the sanction, the government of Iran consistently invested in R&Ds of nanotechnology, biotechnology, stem cell research, genetic science, chemical engineering, aerospace engineering, agriculture, laser communication system, computer engineering, and electronic engineering. The government selected one of the three national tasks of the 5-year plan between 2016 and 2021 as technological development, and plans to increase the R&D budget for the task to 400% (4% of the total GDP) by 2030.

One of the goals of the 6th development plan is the implementation of modern technologies for achieving strong positions in industrial manufacturing, service sector, commercial area, and international market, along with prioritizing strategic industries and

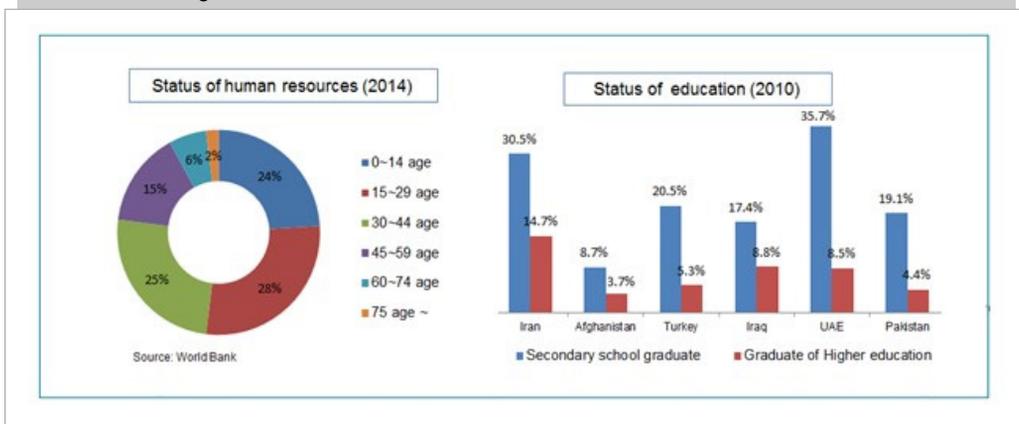
implementing the newest technologies in the fields. The strategic industries are oil, gas, petro-chemistry, transportation, advanced material, construction, ICT, aerospace, marine, agriculture, and water.

After opening the market to the world, Iran's growth potential in culture and ICT is drawing attention from the world. The government of Iran established an expert-raising support system in culture, ICT, and science based on the R&D promotion policy for a long time. As 60% of the total population of Iran are less than 30 years old, the country has a basis to raise experts and learn technologies.

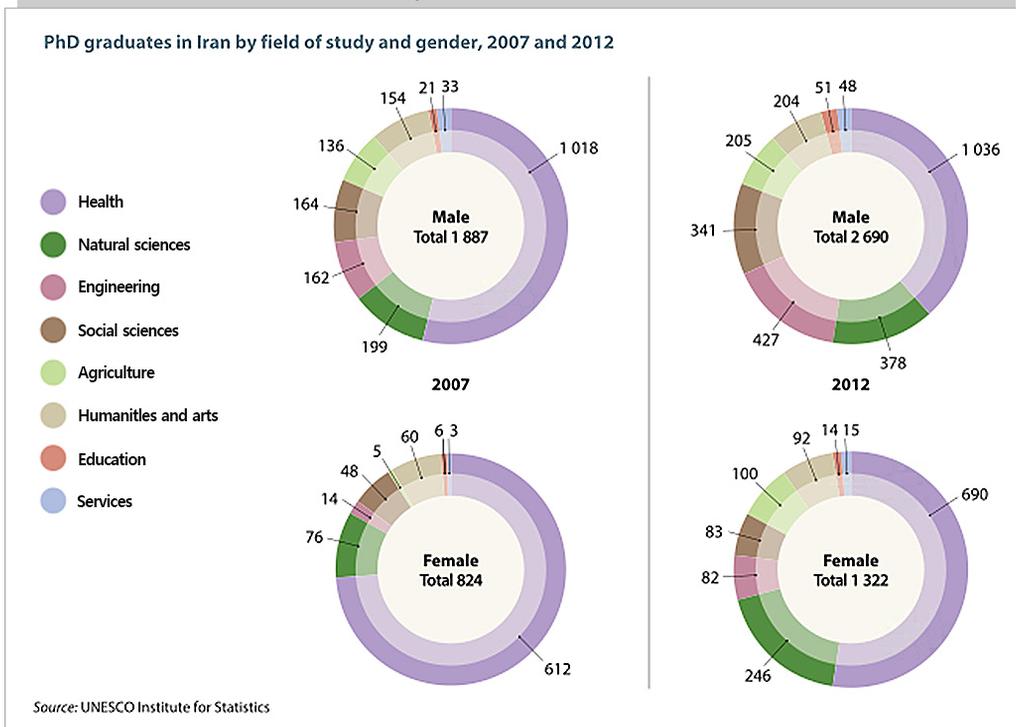
As of 2015, more than half of the total population of Iran are aged 15-44, with an average of 29.5 years old. The country has a high rate of young population along with high educational level. Most of all, people who graduated from engineering school have the highest portion in the population. The population with well-educated young people shows high labor power and long-term spending power.

The UNESCO statistics showed that Iran has the fifth largest engineer production in the world and 38% of students in master's and doctorate degrees are studying science and engineering. Iran is already prepared with a certain level of manpower for technology development.

[Figure 2-10] The current status of human resources in Iran

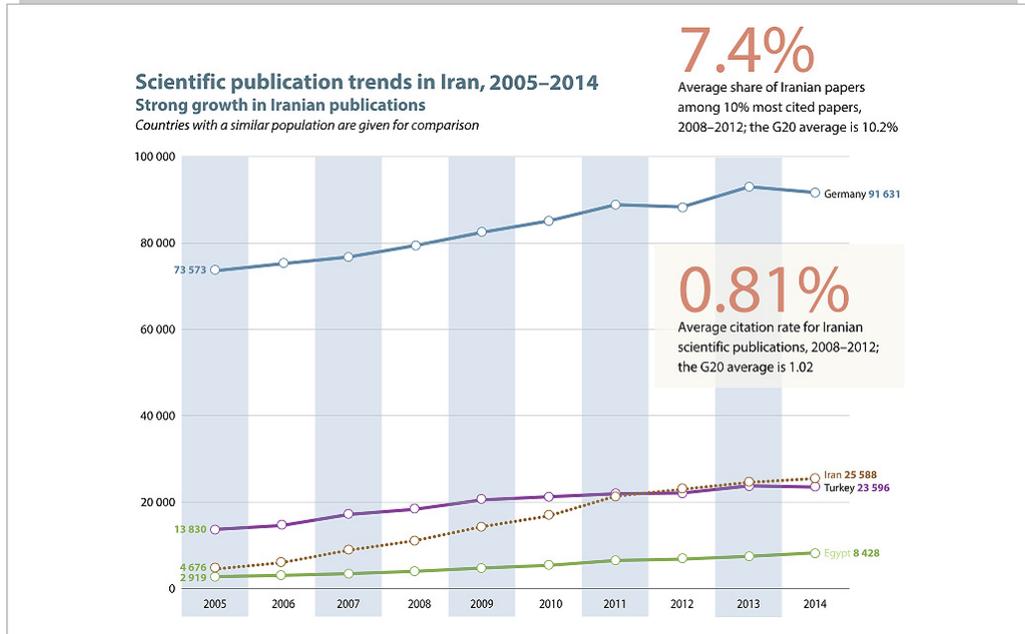


[Figure 2-10] Continued



In the Global Innovation Index 2017, Iran had the second largest portion of science and engineering graduate students and was ranked third place in higher education and 24th place in knowledge impact. Moreover, Iran shows the highest growth rate in terms of scientific thesis paper presentation, and 7.4% out of the top 10% quoted thesis papers are written by Iranian scholars. This is slightly below the average of G20. Scopus shows that Iran is at 17th place in the world in terms of thesis paper production in 2012; therefore, the country has the scientific technologies that are in the same level as advanced nations.

[Figure 2-11] The current status of scientific publication in Iran



(2) Trend in the Venture Market of Iran⁹²⁾

As of October 2017, Iran is in the trend of business venture based on smartphones. The related markets to this trend is growing. Bank Melli Iran invested USD 26 million to the knowledge-based new venture companies for establishing new businesses. Those ventures focus on selling personally made products on social network services or substituting overseas direct purchases. Tchrasa estimates that there are over 400 such start-ups in Tehran.

Various institutions for promoting start-ups have dynamic activities in Iran. Avatech is one of the most representative accelerators that promote start-ups and it was established based on the investment of Sara Venture (venture capital). Its goal is to raise 100 start-ups by 2018. Companies selected by Avatech's program are supported with mentorship and business space. Start-up training, networking, and other benefits, along with up to USD 8,000 investment are provided as well. There are various accelerators to the start-ups, such as DMOND of Amidi Group, Trigup of FANAP, and Setak, which are working with the Sharif University of Technology.

92) KOREA TRADE CENTER, TEHRAN (KOTRA) data (2017), the cultural trip Startup blink, Tchrasa

[Table 2-23] Representative accelerators in Iran

Type	Title
Startup Accelerator	TAC
	Avatech (established in 2014)
	Finnova
	MAPS
Venture Capital	Sara Venture
	Iratel Ventures
	Griffon Capital

“Snapp,” “Zoodfood,” “Bamillo,” “Digikala,” “Cafe Bazaar,” and other smartphone-based new start-ups are making their mark in the industry, and as they receive investments from foreign companies, Iranians are now paying more attention to start-ups. The new knowledge-based companies increased from 52 in 2014 to 2,732 in 2016. University students and young Iranians have high interests in start-ups, but they are having difficulties because of lack of related regulations, poor infrastructure in minor areas, funding problems, lack of market experts and foreign investors, difficult access to the foreign markets, and lack of technology and knowledge.

A representative success of this trend is Snapp, the Iranian version of Uber that acquired the smartphone-based transportation market in advance. The company is expanding its business as they received an investment worth USD 20 million from “MTN Irancell” and “MTN.”

[Table 2-24] Major start-ups in Iran

기업명	비고
 بررسی، انتخاب و خرید آنلاین ورود به سایت فروشگاه اینترنتی دیجی کالا	www.digikala.com <ul style="list-style-type: none"> • Date established: 2006 • Number of employees: 900 • Sales: USD 140 million • Area: Online distribution
	www.aparat.com <ul style="list-style-type: none"> • Date established: 2011 • Area: Video-sharing service (YouTube of Iran) • Enterprise value: USD 30 million (2014)
	cafebazaar.ir <ul style="list-style-type: none"> • Area: Iran Appstore • Enterprise value: USD 20 million (2014)

[Table 2-24] Continued

기업명		비고
 اسنپ، یک کلیک تا مقصد!	snapp.ir	<ul style="list-style-type: none"> • Area: Transportation service app • Uber of Iran
 snappfood	www.zoodfood.com	<ul style="list-style-type: none"> • Area: Online food delivery app
	www.bamilo.com	<ul style="list-style-type: none"> • Date established: 2013 • Sales: USD 7.87 million • Area: Online distribution
 zarinpal	www.zarinpal.com	<ul style="list-style-type: none"> • Area: Online payment service

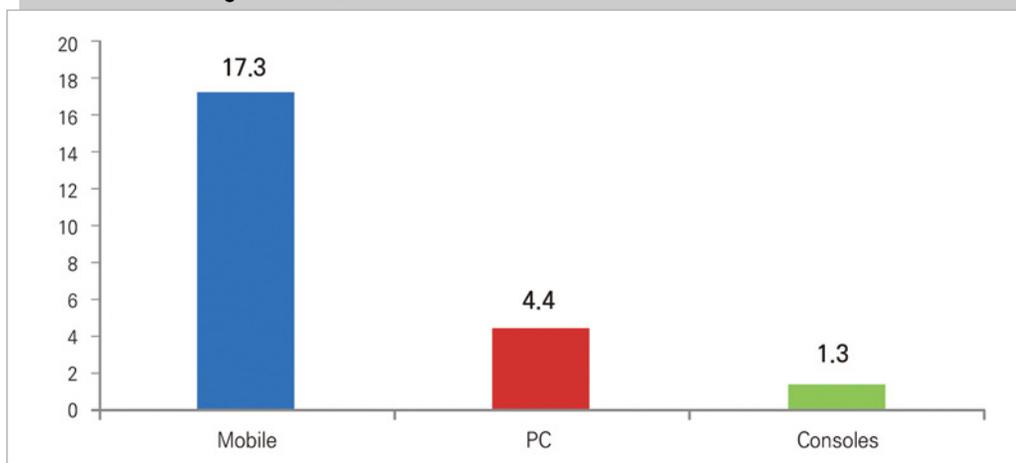
The most representative start-ups of Iran have problems with budget, standard service, quality, and lack of marketing techniques. To improve such problems, consultation with experts and raising related experts are required along with constant efforts. Nevertheless, many entrepreneurs lack materials for start-up, business management skills, and other preparations to reach the global level.

Currently, 40 million people in Iran, about half of its population, are using smartphones. There are 69 million mobile subscribers along with LET, 3G/4G, and other mobile communication environments similar to those in advanced nations. Moreover, Iran's high-speed Internet penetration rate is 65% and still growing.

There are 23 million game users in Iran, including wire/wireless Internet services, and 17 million of them enjoy mobile games.⁹³⁾ In addition, 73% of game users use smartphone for games and the daily average game play time is 79 minutes. Around 30% of the total gamers pay costs for playing games and the total sales is about USD 1.53 million.

93) 2017 DIREC Report

[Figure 2-12] The current status of mobile users in Iran



The illiteracy rate in Iran is only 20% and the country has a good environment for combining new technologies based on ICT. With these, communication is likely to show a high growth rate in Iran. Therefore, Iran is expected to form a start-up market including smartphone-based services, digital contents, mobile apps, and online shopping malls similar to Korea's venture boom based on IT development in 2000s.

Currently, Iran has no specific policy on start-ups, and companies must receive permissions and certificates to conduct their businesses depending on the products they offer. In addition, the start-ups based on the Internet must be approved by the Ministry of Industry, Mine and Trade of Iran and the CBI to service e-commerce systems as well as register their companies to "E-namad" and "Nersart." Furthermore, they must get permissions from the Ministry of Culture and Islamic Guidance because services and products must be confirmed whether they are suitable for Islamic societies and culture.

To enter the stock market, the companies must get certificates from "Sazmane Boors." To start a business in Iran, a corporate body must be established to be permitted by the government. In addition, every company must hire an accountant to handle tax payments.

These regulations on startups are somewhat confusing, but many young Iranians are engaging the start-up market. This is indeed the field with enormous potential, but with inadequate local policies and services, poor quality, lack of experts, and technologies that are becoming obstacles in the market. Moreover, the limited scope of items for start-up is delaying the rapid growth in Iran. Nevertheless, the start-up market of Iran is slow but growing, and once the market overcomes the influences of the economic sanction and more foreign investments come in, it will improve greatly. The start-up market based on smartphones is still in the early stage but making huge profits. This market is expected to have various offerings and be led by new driving forces.

(3) Policy Development

The SWOT analysis for IP commercialization policy development of Iran shows that the market has enough strength and opportunity factors. Especially, the government of Iran shows a strong will on IP commercialization along with many high-quality human resources to create IP. Iran will most likely become one of the IP powerhouses in the world if its mid-to long-term plans are well organized and executed. However, the department of IP must unify various cooperation. As IP commercialization must be mindful of the global market trend, Iran's political risks must be solved first to allow the IP companies of Iran to enter the global market.

[Table 2-25] SWOT analysis for developing policies

Strength	Weakness
<ul style="list-style-type: none"> • Strong will of the Irani/an government to develop technologies (high possibility of acquiring IP) • Strong will of foreign companies to enter Iran along with high investment will (high possibility of technology transfer) • Plenty of human resources to develop new technologies with high rates in those with masters and doctorate in engineering • Raising experts in universities such as the University of Tehran and Sharif University of Technology, which are in the top 500 universities in the world 	<ul style="list-style-type: none"> • Inadequate patent system and low awareness (must improve the environment to protect patentees) • Inadequate IP commercialization system • Built an isolated industrial system during the economic sanction (gaps from the global market) • Lack of experiences due to the inactive enterprise ecosystem (Creating, utilization of IP, etc.)
Opportunity	Threat
<ul style="list-style-type: none"> • Good environment of wire/wireless communication for technology venture start-ups (smartphone penetration rate and the Internet environment) • The manufacturing basis is certainly industries oriented, therefore easy to apply new technologies to products • The youth have high interest on technology start-ups • Able to apply new technologies in the process of improving (production process, equipment, quality, etc.) lagging behind manufacturing businesses 	<ul style="list-style-type: none"> • Political risks (relation with the US) • Policy development and execution are difficult because of inadequate cooperation between departments (distribution of IP management system into the Ministry of Science, Research and Technology, Ministry of Industry, Mine and Trade, Patent Office, Ministry of Justice, etc.) • Not easy to raise patent attorney, technology transfer agent, and other experts because of the monopolized structure of lawyers

5. Key Tasks for Iran's Intellectual Property Commercialization

The plan to promote Korea's technology transfer business has been established six times since 2000. In the First Plan, the system for the creation and activation of the technology trading market was improved and the basis for promoting commercialization was established. In the Second Plan, Korea introduced technology finance for technology transfer and expansion of commercialization base, and established the basis for international cooperation. In the Third Plan, a system has been established to discover and manage technology trusts and promising technologies to nurture technology-based global companies (MTB), and helped them to enter the global market by creating funds. In the Fourth Plan, the expertise of the TLO organization was strengthened for the linkage of technology and the market. In the Fifth Plan, technical marketing capabilities have been enhanced and the support for initial commercialization success has been strengthened.

The Sixth Plan, established in 2017, validated policies to support the acquisition of open technology by enterprises and promote technology start-ups. The key tasks to proceed IP commercialization were produced by implementing Korea's technology transfer commercialization promotion models.

[Strategy 1] created patents for IP commercialization and produces strategic tasks for creating DB. [Strategy 2] developed tasks for financial supports that are required for commercialization such as technology valuation, business funds, and marketing. [Strategy 3] developed tasks necessary for making the commercialization ecosystem. As policy tasks to build commercialization institutions of public research institutes and vitalize IP transaction, [Strategy 4] developed tasks for building infrastructure such as system maintenance for IP commercialization and cultivation of manpower. The implementation plan must be established in each stage depending on key tasks.

[Table 2-26] Policy task recommendations for IP commercialization in Iran

Key Task	Detail
<p>【Strategy 1】 Intellectual property resources management</p>	<ol style="list-style-type: none"> ① Developing patent and promoting utilization ② Building IP information DB ③ Developing and supporting IP commercialization models (R&BD)
<p>【Strategy 2】 Building an intellectual property finance and support system</p>	<ol style="list-style-type: none"> ① Supporting IP commercialization initial capital ② IP valuation and financial activation ③ Marketing support
<p>【Strategy 3】 Building an intellectual property commercialization support system</p>	<ol style="list-style-type: none"> ① Establishing IP commercialization support institution (TLO) ② Activating an industry, university, and institute network ③ Supporting IP transaction
<p>【Strategy 4】 Creating a foundation for intellectual property commercialization</p>	<ol style="list-style-type: none"> ① Improving technology transfer and commercialization system (technology transaction institution, companies, etc.) ② Raising technology transfer and commercialization experts ③ Building technology transfer and commercialization statistics system

[Strategy 1] Intellectual Property Resources Management

(1) Developing Key Patent and Promoting Utilization

Necessary for: To proceed with IP commercialization, patents that are likely to be commercialized must be secured quantitatively. To do so, R&D based on IP is advanced. IP shall be designed first than proceed with technology development that realizes the IP.

Main contents: The strategy builds a support system that would acquire IP in the R&D life cycle. In the technology planning stage, the patent trend analysis is executed to develop promising technologies and acquire outstanding patents. In the technology development execution stage, claiming IP will be supported through prior art searches. In the technology development completion stage, patent portfolios centered on products will be developed.

(2) Building IP Commercialization Information Database

Necessary for: An information network that allows consumer companies to access patents owned by public institutions by accumulating information on supply of technology (patent) that are necessary for IP commercialization.

Main contents: The strategy builds a database required for IP commercialization by collecting, analyzing, and processing patent and technology information, and supplies the information to consumer companies.

(3) Developing and Supporting IP Commercialization Models

Necessary for: To promote IP commercialization, it must be planned and R&D must be advanced from the IP development stage (R&BD). The gap between technology and market can be reduced from the early development stage to raise the success rate of commercialization.

Main contents: The strategy can reflect the market creating business model from the technology development (R&D) planning stage to proceed the development tasks and create outstanding IP to allow companies to use them in the global market.

[Strategy 2] Building an Intellectual Property Finance and Support System

(1) Supporting IP with Finance and Commercialization Institution

Necessary for: To execute businesses using IP, financial supports are required from the initial stages. Institutions must also be trained so they could provide business strategy consultations and incubations.

Main contents: Financial supports on IP commercialization are important to SMEs with technologies to achieve early commercialization. The basis for investment, loan, and other financial supports are necessary. Moreover, training institutions that can collaborate with technology financing such as business strategy consulting incubation and venture capital investments that are required for IP commercialization.

(2) IP Valuation and Financial Activation

Necessary for: For IP commercialization, IP must allow transfer, investment in kind, and finance to take important roles. This will impact on IP valuations.

Main contents: In the early stage of IP commercialization, reliable valuation models would play crucial role when IP is held for loan to complement insufficient funds. Therefore,

reliable IP valuation methods and evaluation institutions as well as experts on the methods must be raised to vitalize the valuation.

(3) Intellectual Property Marketing Supports

Necessary for: By supporting companies' marketing and promotion of their IP, they are allowed to use the technologies of public institutions.

Main contents: The strategy supports IP technology briefing session participation and opening of exhibition, along with building a global technology transaction network, completing technology marketing data, certification test, and consulting.

[Strategy 3] Building an Intellectual Property Commercialization Support System

(1) Establishing IP Commercialization Institution (TLO)

Necessary for: For commercialization, institutions that would manage IP transaction or support commercialization must be raised. They mediate patents of public research institutes and companies by developing various business models related to information collection and analysis of information necessary for IP commercialization.

Main contents: The strategy establishes functions and roles of IP commercialization institutions and builds them in public research institutes. In the early stage, it supports personnel expenses on the TLO manpower to help them raise their capabilities and proceed with specialization and independency in the long term. If this is operated with the University of Tehran, which has outstanding biotechnologies, and with Sharif University of Technology, which has excellent electronics, IT would be a reasonable method.

(2) Activating an Industry, University, and Institute Network

Necessary for: To be supported in terms of knowledge and manpower, which are the main difficulties of technology transfer companies, an industry, university, and institute network is necessary for cooperative institution activities. Companies that were transferred with technologies need to have follow-up support including constant additional technology development, training, and experts to improve their technology completeness and commercialization success.

Main contents: An industry, university, and institute network allow utilization and proliferation of technology development outcomes based on market demands through vitalization of knowledge, information, and manpower exchanges. IP that is reflected with

the market needs increase marketability and business values to raise the success rate of commercialization.

(3) Raising IP Commercialization Institutions

Necessary for: Institutions that can develop promising technologies in early stage, incubate the technologies to raise the IP value, and build a network with companies are needed.

Main contents: The strategy raises institutions that can collect and analyze information related to commercialization as well as those that can find, develop, and converge promising IP. Moreover, the strategy raises institutions that can provide consultation and advice on IP commercialization as well as attract investments.

[Strategy 4] Creating a Foundation for Intellectual Property Commercialization

(1) Improving Intellectual Property Commercialization System

Necessary for: To vitalize IP commercialization of public research institutes, a system is necessary for building technology transaction market and its vitalization. Various departments would establish co-policies and cooperation through the system.

Main contents: The system must be improved to enable patent transfer and licensing. In addition, a plan of promotion for IP commercialization must be established and technology transfer institution system must be implemented as well as support system for designating and promoting technology transaction institutions and evaluation institutions must take place.

(2) Raising Intellectual Property Commercialization Experts

Necessary for: There are no IP commercialization works, including license agreement, valuation, marketing, IP management, information analysis, and other areas, that require expertise. Therefore, trainings for raising experts, national qualification system, and other plans are needed to promote the IP commercialization of Iran.

Main contents: Universities, research institutes, and companies must establish their own IP commercialization bodies to raise IP commercialization experts of Iran. The expert capabilities must be raised by designing and operating trainings. Moreover, follow-up measures for the experts to actively work in the IP commercialization market is necessary.

(3) Building Intellectual Property Commercialization Statistics System

Necessary for: Precise statistics data must be established to prepare IP commercialization policies and support policies. Statistical researches are necessary that reflect indexes being used in advanced nations.

Main contents: The strategy sets international indexes; builds a system of creating, managing, and utilizing reliable statistics; as well as creates international comparison data through statistical researches and other necessary data for policy establishments.

[Table 2-27] Intellectual property commercialization activities

	IP Commercialization Support Activities	Activity Contents
1	Planning and supporting R&BD	Supporting activities on product development based on the market demands and establishment and development of IP commercialization models
2	Supporting technology valuation	Supporting activities on technology valuation for technology value, marketability, and rights on research outcomes (patent, etc.)
3	Building, managing, and creating technology information DB	Activities on building technology information (technology development, related patents) that can be commercialized and providing them to people
4	Supporting technology certification and standardization	Supporting activities on the certification of performance and system of product, process, and service that are applied with technologies to be commercialized as well as activity on global technology standards
5	Supporting technology transaction	Technology transfer: Activities on transferring and supporting know-hows to develop technologies (patents) into new applied areas and allow companies to use them
		Technology transaction: Supporting activities on mediation and transaction of developed technologies through technology transaction institutions

[Table 2-27] Continued

	IP Commercialization Support Activities	Activity Contents
6	Supporting enhancement of IP commercialization institution	<p>Raising and supporting commercialization manpower: Expanding experts for IP commercialization and supporting training and education related to their work (example: raising technology evaluator and TLO expert)</p> <p>Supporting commercialization institution: Activities on promoting and supporting various forms of technology transfer, and for transaction and commercialization institutions to have expertise (example: establishing and operating TLO, technology holding company)</p>
7	Supporting technical personnel in fields	Supporting activities on matching and dispatching R&D experts to the field to improve the possibility of commercialization success
8	Supporting marketing	<p>Marketing and PR: Supporting activities on strategy formulation for vitalizing transaction such as analyzing and consulting on related markets</p> <p>Pioneering the market: Supporting activities on raising the global market acceptance of technology, product, process, and service for commercialization</p> <p>Entering the global market: Supporting activities on pioneering export outlets to increase acceptance of technology, product, process, and service for commercialization in the foreign markets</p>
9	Improving law and policy	Improving activities on infrastructure for promoting commercialization and eliminating hindrance factors of technology development and market entrance in the process of commercialization of university, government-funded research institute, and company
10	Creating financial support and fund	Activities on supporting commercialization with financial problems, diversifying investment and loan, as well as creating and expanding funds for reducing risks of IP commercialization of institutions and companies along with promoting SMEs in new industries

Chapter 3. Plan to Raise Competitiveness of SMEs⁹⁴⁾ and Ventures through Intellectual Property

<Contents>

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1. Background of Policy Recommendations

A. Intellectual Property for SMEs in Developing Countries

The United States, Germany, Japan and other advanced nations have been studying and proceeding the enhancement of their competitiveness as an important national task and key industrial policy for a long time. Germany considers SMEs as one of the most important driving forces and key resources of their competitiveness. This is the reason why Germany became the leader of the European economy. In case of powerful SMEs like Hidden Champion,⁹⁵⁾ that has competitiveness similar to large companies in the global market, Korea

94) The small and medium-sized enterprises (SMEs) are generally companies with less than a certain number of manpower to engage businesses. The abbreviation "SMEs" is being used in international organizations such as the European Union, World Bank, UN, and WTO.

has been implementing the similar policy model for years.

Enhancing global competitiveness of SMEs leads to a policy requirement of increasing global competitiveness for actual economic growth. As acquisition of intangible assets like IP becomes the key for companies in the 21st century, the importance of competitiveness of SMEs is increasing. This is because of the fact that SMEs are more in numbers than large companies in every country and that they hire more employees. Moreover, they are focusing more on becoming SMEs that are knowledge-based, not just simple manufacturers.

Therefore, many countries in the world are implementing policies of promoting technology development for SMEs to acquire technology-intensive and high-value resources. This is especially more so to newly developing countries that want to achieve sustainable developments beyond the entry barriers of advanced nations. Despite such importance, newly developing countries like Iran are in a difficult policy situation where “quantitative growth” and “qualitative growth” must be considered at the same time to raise SMEs that are in accordance with the global era.

This means that Iran must be concerned about changing its SMEs as knowledge-based and the same time consider ways to increase the global competitiveness of those SMEs. Iran is facing the necessity of developing the SME policies to develop outstanding technologies and acquire significant amount of intangible IP such as patent and trademark. The following contents suggest the ways to enhance the IP competitiveness of SMEs that fit the characteristics of Iran’s policies.

B. Correlation Between Intellectual Property of SMEs and Economic Growth

There has been a lot of studies on correlation between R&D and economic growth or technological innovation and economic growth. However, there has been relatively small number of studies on the correlation between IP and economic growth. But the importance of IP is increasing for not just companies but also countries in the 21st century, therefore the studies on this trend are also increasing. The following contents give an overview of the correlation studies between IP and economic growth as well as increase the validity of the Iranian policies to enhance the competitiveness of SMEs in Iran from the perspective of IP.

So far, most of the precedent studies were about protecting the IP of companies and economic growth. But recently, studies on IP policy effects have been making progress. The study of relations between IP and economic growth (Lee et al., 2016) states that IP increases added value of industries and attraction of foreign investments. The study

95) The term from the German economist Hermann Simon’s “Hidden Champion” (2008). It refers to powerful SMEs in the global market with less than USD 4 million in annual sales, but with the market shares of third place in the field or first place in the continent.

developed a convergence model that considers systems and policy characteristics to analyze the economic effects of various IP policies. Moreover, it attempted an analysis of actual proof by reviewing major issues that are illegible for economic analysis.

The analysis results proved that IP increases added values to industries by improving efficiencies. Furthermore, the study analyzed the impacts of IP characteristics owned by companies on foreign investments to local market. The results showed that companies vitalized patent creation in quantity and exerted efforts on increasing quality by creating outstanding patents that include a large number of claims. This brought more foreign investments to the local market.

C. The Global Competitiveness of Iran (Strength and Weakness)

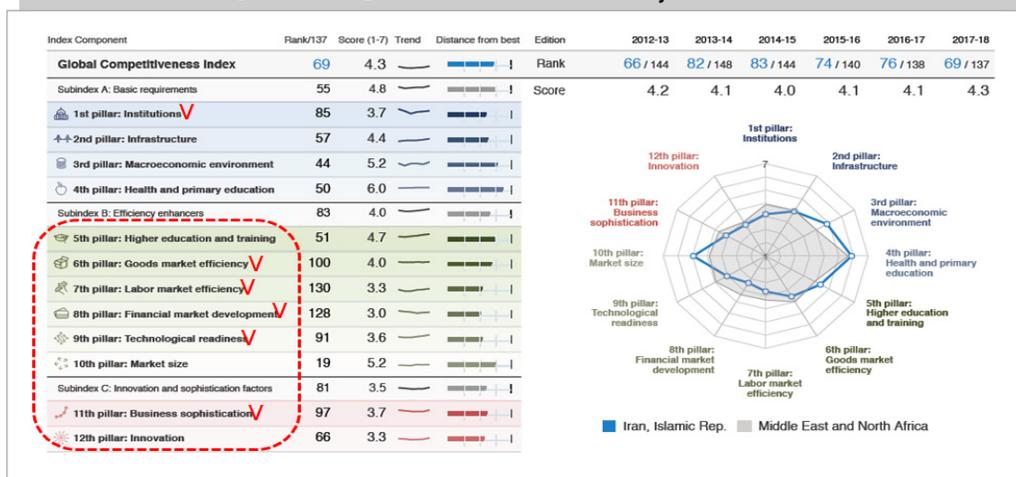
In the annual Global Competitiveness Index of the World Economic Forum, Iran is in the 69th place out of 116 countries.

[Table 2-28] Global Competitiveness Index 2017-2018 rankings

Economy	Score ¹	Prev. ²	Trend ³	Economy	Score ¹	Prev. ²	Trend ³	Economy	Score ¹	Prev. ²	Trend ³
1 Switzerland	5.86	1	.....	60 Brunei Darussalam	4.52	58	.....	90 Argentina	3.95	104	.....
2 United States	5.85	3	.....	61 Costa Rica	4.50	54	.....	91 Nicaragua	3.95	103	.....
3 Singapore	5.71	2	.....	62 Slovenia	4.48	56	.....	94 Cambodia	3.93	89	.....
4 Netherlands	5.66	4	.....	63 Bulgaria	4.46	50	.....	96 Tunisia	3.93	95	.....
5 Germany	5.65	5	.....	64 Panama	4.44	42	.....	98 Honduras	3.92	88	.....
6 Hong Kong SAR	5.53	9	.....	65 Mexico	4.44	51	.....	99 Ecuador	3.91	91	.....
7 Sweden	5.52	6	.....	66 Kuwait	4.43	38	.....	100 Lao PDR	3.91	93	.....
8 United Kingdom	5.51	7	.....	67 Turkey	4.42	55	.....	101 Bangladesh	3.91	106	.....
9 Japan	5.49	8	.....	68 Latvia	4.40	49	.....	102 Egypt	3.90	115	.....
10 Finland	5.49	10	.....	69 Viet Nam	4.36	60	.....	103 Mongolia	3.90	102	.....
11 Norway	5.40	11	.....	70 Philippines	4.35	57	.....	104 Kyrgyz Republic	3.90	111	.....
12 Denmark	5.39	12	.....	71 Kazakhstan	4.35	53	.....	105 Bosnia and Herzegovina	3.87	107	.....
13 New Zealand	5.37	13	.....	72 Rwanda	4.35	52	.....	106 Dominican Republic	3.87	92	.....
14 Canada	5.35	15	.....	73 Slovak Republic	4.33	65	.....	107 Lebanon	3.84	101	.....
15 Taiwan, China	5.33	14	.....	74 Hungary	4.33	69	.....	108 Senegal	3.81	112	.....
16 Israel	5.31	24	.....	75 South Africa	4.32	47	.....	109 Seychelles	3.80	n/a	.....
17 United Arab Emirates	5.30	16	.....	76 Oman	4.31	66	.....	110 Ethiopia	3.78	109	.....
18 Austria	5.25	19	.....	77 Botswana	4.30	64	.....	111 El Salvador	3.77	105	.....
19 Luxembourg	5.23	20	.....	78 Cyprus	4.30	83	.....	112 Cape Verde	3.76	110	.....
20 Belgium	5.23	17	.....	79 Jordan	4.30	63	.....	113 Ghana	3.72	114	.....
21 Australia	5.19	22	.....	80 Colombia	4.29	61	.....	114 Paraguay	3.71	117	.....
22 France	5.18	21	.....	81 Georgia	4.28	59	.....	115 Tanzania	3.71	116	.....
23 Malaysia	5.17	25	.....	82 Romania	4.28	62	.....	116 Uganda	3.70	113	.....
24 Ireland	5.16	23	.....	83 Iran, Islamic Rep.	4.27	76	.....	117 Pakistan	3.67	122	.....
25 Qatar	5.11	18	.....	84 Armenia	4.25	75	.....	118 Cameroon	3.65	119	.....

Among the 137 countries listed for surveying their technological innovation competitiveness that are closely related to IP, Iran ranks in various places as follows: 88th in capacity for innovation, 55th in the quality of scientific research institutions, 66th in company spending on R&D, 94th in university-industry collaboration in R&D, 50th in government procurement of advanced technology products, 39th in availability of scientists and engineers, and 84th in PCT patents. These IP indexes will be explained with more details in the following contents.

[Table 2-29] Performance overview by detail field



2. The Current Status and Competitiveness of SMEs in Iran

A. Economic Percentage of SMEs in Iran

In the case of newly developing countries like Iran, SMEs take large portions in the economy. However, Iran does not have a standard that would fit to the general definition of SME. As departments, institutions, and organizations related to SMEs in Iran all have their own definitions or classifications, it means that the SME policy lack consistency.

First, SMEs are industrial and service firms with less than 50 employees, just like the Ministry of Industry, Mine and Trade as defined by Iran. The Statistical Centre of Iran (SCI) uses this to define SMEs. The following table shows different standards for departments and institutions on SMEs.

[Table 2-30] Comparison between the government bodies' definitions of SMEs

State-Run Entity	Max. Quorum Staff	
Ministry of Industry, Mine and Trade	50	
Ministry of Agriculture	50	
ISIPO	5–50	
Executive Decree for Fast Return SMEs	50	
Statistical Centre of Iran	10	
Central Bank of Iran	Micro	10
	Small	10–49
	Medium	50–99
	Large	> 100

Source: CBI (Central Bank of Iran, 2014)

As the table shows, the SCI defines companies with less than 10 employees as SMEs and companies with more than 10 employees as large companies. On the contrary, the CBI considers companies with less than 100 employees as SMEs. These are very different from the Korean standard for SMEs.

The industrial structure of Iran comprises 82,810 small companies and 7,707 medium or large companies according to the CBI statistics (2014). CEO Ali Yazdani of the ISIPO⁹⁶) said that “the level of contribution of SMEs is taking 94%, but the investments toward them are even less than the general areas of the economy”.

Seventy percent of job creation and 50% of GDP are depending on small companies in Iran. However, development and production of such companies are not easy if insufficient amount of opportunities on bank advances and necessary facilities are acquired for them. The average investment on small companies in Iran is about IRR 2 billion, which is equivalent to USD 580,000 in the market.

The statistics about SMEs in Iran in relation to a value-added tax was only 16.8% in the recent years. Despite the 4th and 5th 5-year development plan (2006-2016) focused on the growth and development of SMEs, the companies could not benefit from the government plan because of inadequate policies and distribution of resources.

96) ISIPO: Iran Small Industries and Industrial Parks Organization

[Table 2-31] Economical contribution of major countries by the scale of companies (%)

Countries	SMEs' Share	Micro	Small	Medium	Large
EU (2009)	99.8	92.2	6.5	1.1	0.2
Italy (2009)	99.9	95.8	3.6	0.5	0.1
USA (2005)	57.9	11.1	32.8	14	42.1
Turkey (2012)	99.9	95.54	4.03	0.35	0.08
Indonesia (2012)	99	98.8	1.11	0.09	N/A
Malaysia (2011)	97.3	75	19	3	0.3
Iran (2014)	98	47	45	6	2

Source: ISIPO (2014)

In the same context, the government and private companies are taking up 80% of the entire economy. They have been dominating the business environment with powerful financial structure and, according to a report from the Marilis (Parliament) Research Center of Iran, small companies' capabilities are gradually lagging behind large companies. This shows that a small number of large companies are weakening a large number of small companies in economy.

Significant information and statistics about SME details, such as company scale, employee type, age of company, legal status, technology and financial status, production amount, export, and certification level, are neither available nor complete. Thorough analysis on the details and policy measures that are necessary to support the detail efficiently are crucial.

[Table 2-32] SME percentage in major countries' economic areas (%)

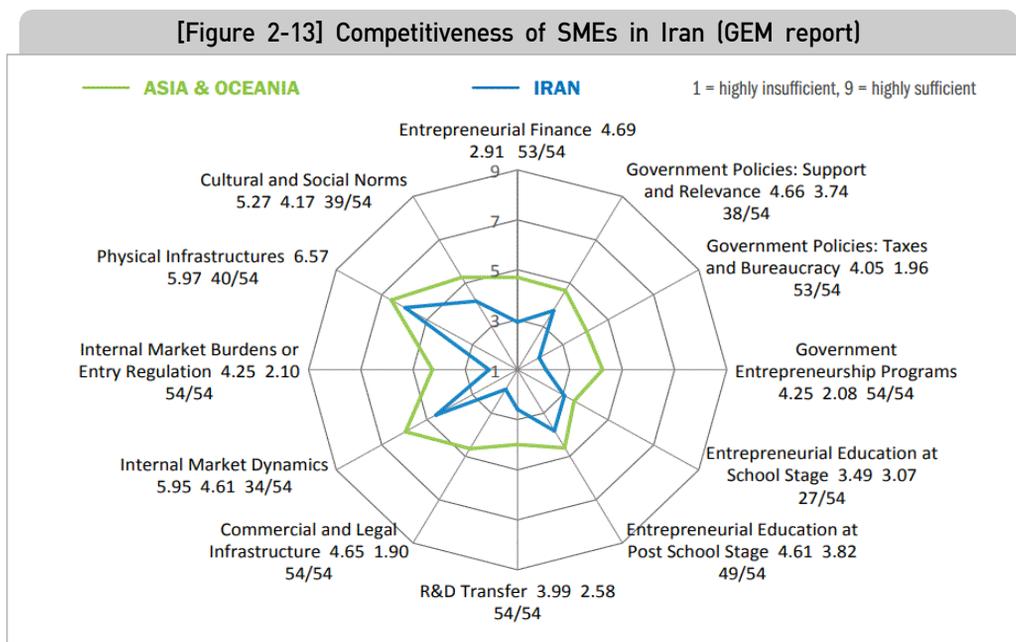
Countries	USA	Germany	Japan	Turkey	Iran
SMEs' number	97.2	99.8	99.4	99.5	98.4
SMEs' employment	50.4	64	81.4	61.1	44
SMEs' capital	38	44	40	65.5	22
SMEs' value added	36.2	49	52	37.7	34
SMEs' export	32	31.1	38	8	N/A

Source: ISIPO (2014)

Unlike other major countries, Iran does not have a well-defined policy system for raising SMEs. However, it is meaningful that Iran's small exchange started the SME market despite difficult environment and the president of CBI requested CEOs of banks and other financial institutes to designate at least 10% portion of the SME loan. This will allow easier financing

for vitalization of SMEs in the future and lay the foundation for creating more jobs.

B. Competitiveness of SMEs in Iran



Source: Global Entrepreneurship Monitor, 2017/18 Global Report

The 2017/18 GEM (Global Entrepreneurship Monitor) report shows the current problems of the companies in Iran. The GEM report is a survey about the business environment for professors and research center experts of about 60 countries. In the 2017/18 report, total 54 countries including Iran participate the survey. The figure above shows the average outcomes of the participating countries in the green line and Iran's outcomes are in the blue line.

C. Competitiveness of SME Support policies in Iran

According to the 2017/18 GEM (Global Entrepreneurship Monitor) report, the competitiveness of Iran's SME-related support policy is one of the lowest ranks out of 54 countries. It means that although Iran's national competitiveness came at around 69th place in the world, the support policy for SMEs is clearly far away from other countries with similar levels. This is an important detail the government of Iran must be mindful of.

[Table 2-33] The Comparison of the SME support policy competitiveness to major countries (54 countries)

Countries	Global Competitiveness ⁹⁷⁾	Government Entrepreneurship Programs Rank	R&D Transfer Rank
Switzerland	1	7	1
USA	2	9	7
Germany	5	5	17
Japan	9	33	8
UAE	17	11	6
South Korea	26	18	28
Saudi Arabia	30	36	49
India	40	21	10
Iran	69	54	54
Morocco	71	42	53
Peru	72	22	39
Uruguay	76	14	18
Brazil	80	48	47
Greece	87	47	25
Argentina	92	13	20
Egypt	100	46	51
Lebanon	105	53	29

Source: Global Entrepreneurship Monitor, Global Report, 2017/18, reorganized

3. Analysis on the Current Status and Competitiveness of Intellectual Property in Iran

A. Intellectual Property and GDP of Iran

To review the IP competitiveness of Iran, it shall be compared with Iran's economic scale. In 2017, the nominal GDP was USD 427.6 billion, the 27th place in the world (2017 IMF standard). The GDP based on PPP was USD 1.5355 trillion, the 18th place in the world (2017 IMF standard). But the per capita GDP showed a greatly different number of USD 5,252, the 98th place in the world (2017 IMF standard). The following table shows the GDP based on PPP.

97) World Economic Forum, The Global Competitiveness Report, 2017/18

[Table 2-34] Development of growth in intellectual property applications and GDP

Year	Patent	Trademark	Industrial Design	GDP ⁹⁸⁾
2002	911	11,818		867.52
2003	1,296	7,647		942.47
2004	2,441	18,506		983.34
2005	4,071	21,370		1024.73
2006	5,995	24,310		1083.18
2007	10,700	29,503		1181.93
2008	15,463	31,792		1192.84
2009	12,244	24,453		1220.45
2010	11,197	26,991	3,706	1300.73
2011	11,642	27,611	4,094	1349.50
2012	10,700	26,032	3,559	1260.32
2013	11,343	32,860	4,637	1236.23
2014	13,768		8,831	1289.92
2015				1270.57
2016	15,081	53,696	15,836	

Source: WIPO Statistics Database (2017), reorganized

For Iran, the IP growth is increasing steeply compared to its economic growth. Patent, trademark, and industrial design all show different growth in the IP development. In 2002, there were 911 patent applications and the number was increased 16 times to 15,081 in 2016. In the case of trademark, the number of applications was increased 5 times to 53,696 from 11,818 in the same period. For the case of industrial design, the first recorded applications in the year 2010 were 3,706 and this number was increased fivefold to mark 15,836 applications in 2016. It shows the same growth speed as trademarks. In this period, although the GDP only showed a growth rate that was less than twofold, the number of IP applications in Iran had an eye-opening growth for the last 10 years. Especially, the rapid growth in the amount of patent application is very suggestive of the economy.

98) GDP based on PPP, Billion USD, Constant 2011 USD

B. The Current Status of Intellectual Property System in Iran

The Islamic Republic of Iran announced on July 4, 2013 that the country submitted an application to join the PCT of the WIPO.⁹⁹⁾ As Iran joined the PCT, 148 countries joined the treaty and the treaty took effect from October 4, 2013. As a country that applies the rules of the PCT, Iran automatically became one of the international countries applied the designation since October 4, 2013. People or residents of Iran were able to request for the international preliminary examination and file international applications through the PCT.

In addition, Iran enacted the new “Patents, Industrial Designs and Trademarks Registration Act” in 2008 and has been protecting inventions, utility models, industrial designs, and trademarks since then. They must file applications at the Patent Office. Although there are the Copyright Law and Trademark Law in Iran, the related regulations are not adequate; therefore, computer programs and other various products were illegally mass copied and currently being distributed in the market.

Many cases of placing orders on counterfeit goods (usually in China) with the same or similar trademarks and importing them through free trade zones (FTZ) are being uncovered. For these copyright infringement cases that violate IP rights, all legal remedies, both civil and criminal (legal punishment, fine, indemnification), are being recognized. Especially for copying computer software, the copyright holders can appeal through the Ministry of Science, Research and Technology.

As Iran joined the Paris Convention for the Protection of Industrial Property, its patents can be based on the patent applications overseas and also make applications that claim priority based on the Paris Convention. Moreover, as Iran joined the Madrid Agreement Concerning the International Registration of Marks, its patents can make applications for international trademarks. However, as Iran did not join the WTO, the TRIPS is not applied. Although Iran joined the Nice Agreement Concerning the International Classification of Goods and Services for the Purposes of the Registration of Marks, the country uses Class 45 on the international classification in terms of product and service classifications on trademarks. Iran did not join other international copyright agreements (the Berne Convention for the Protection of Literary and Artistic Works) or trademark agreements.

99) The Patent Cooperation Treaty (PCT) is an international law on the application of patent. When a patent applicant submits a single application form to a local patent office or international bureau of patent, the treaty endows the effects of applied patent in designated countries after examinations through the International Searching Authority (ISA) and allows the patent to be registered in multiple countries.

C. Analysis of Intellectual Property Competitiveness in Iran

This report will not review the IP types in Iran, but instead focus on the competitiveness of patent, trademark, industrial design, and utility model locally and abroad. Other than patent, the most representative type of IP, there is copyright, but there is a system difference between the two of them where copyright occurs without application processes. Therefore, copyright will be excluded from this report for it is difficult to make significant statistical figures. To compare competitiveness objectively, the report will look at the rankings of the WIPO member countries (191 countries as of 2017) to figure out the strengths and weaknesses of different IP types.

(1) Patent Competitiveness in Iran

As the previous contents showed, Iran has been showing rapid increase in patent application for the last 10 years. First, the local patent applications of Iran was increased 16-fold to mark 14,930 applications in 2016 from 910 applications in 2002 when the statistical survey first started. The global ranking was also increased ninefold to become the 31st place among 191 countries. As for the local patent application competitiveness of locals, Iran has an outstanding patent application competitiveness that is one of the top 10 in the global ranking. In the case of patent applications of foreigners, the number was increased by 2.4 times to mark 702 applications in 2016 from 285 applications in 2002. The global ranking for the applications by foreigners was increased to 36th place from 57th out of 191 countries. Although the applications of foreigners had more than doubled, this is still comparatively lower than local applications.

In 2002, there was only one overseas patent application but the number was increased to 151 applications in 2016. This is a huge improvement in terms of quantitative growth but this is still at the 65th place in the global ranking of 2016, which is low in comparison to the local patent applications. The competitiveness of local patent applications in Iran is fairly high in the world, but applications of foreigners or overseas patent applications are not as good as the local applications. An improvement policy to this condition is necessary.

[Table 2-35] Global patent application competitiveness of Iran (2002–2016)

Year	Local Patent Application				Overseas Patent Application	
	Local		Foreigner		Application	World Ranking
	Application	World Ranking	Application	World Ranking		
2002	910	31	285	57	1	100
2003	1,287	27	355	52	9	103
2004	2,426	23	356	48	15	89
2005	4,051	17	443	46	20	86
2006	5,970	12	557	40	25	71
2007	10,648	10	502	43	52	75
2008	15,403	9	552	40	60	70
2009	12,184	10	516	38	60	67
2010	11,108	10	528	42	89	66
2011	11,529	10	489	45	113	68
2012	10,622	10	432	44	78	73
2013	11,305	10	338	50	38	88
2014	13,683	9	119	75	85	75
2015					98	75
2016	14,930	9	702	36	151	65

Source: WIPO Statistics Database (2017), reorganized

When the patent application is an index that shows quantitative IP activities, the patent registration is an index for the qualitative level of IP. The patent registration competitiveness of Iran is as follows. The local registrations were increased sevenfold from 440 in 2002 to 3,111 in 2016. The world ranking was also increased to 15th place from 29th out of 191 countries. This is not as high as the local patent application competitiveness, but is still a global level of increase considering the economic power and competitiveness of Iran. As for the patent registration of foreigners, the number decreased to 157 in 2016 from 202 in 2002. The number was at its highest in 2009, with 750 registrations, but has been decreasing ever since. The global ranking in the patent registration of foreigners decreased from 48th to 49th place. The patent registration of foreigners is not improving well compared to the local registrations. The trend is similar to the overseas patent registration. There were five overseas patent registrations in 2002 and the number increased to 44 registrations in 2016. Despite this significant growth, the world ranking remained in similar levels of 79th place in 2016 from 86th place in 2015, which was from 85th place in 2002.

[Table 2-36] Global patent registration competitiveness of Iran (2002–2016)

Year	Local Patent Registration				Overseas Patent Registration	
	Local		Foreigner		Registration	World Ranking
	Registration	World Ranking	Registration	World Ranking		
2002	440	29	202	48		
2003	634	26	309	38	5	85
2004	1,228	17	226	42		
2005	2,605	13	285	40	3	79
2006	4,074	10	439	36	4	80
2007	6,745	9	547	28	6	90
2008	10,118	8	470	35	5	97
2009	5,999	10	750	31	9	82
2010	5,112	10	260	44	17	78
2011	4,835	11	309	41	33	68
2012	5,227	10	454	36	30	70
2013	3,373	11	103	64	43	70
2014	2,880	14	180	48	43	79
2015					31	86
2016	3,111	15	157	49	44	79

Source: WIPO Statistics Database (2017), reorganized

In summary, the patent competitiveness of Iran is considerably high considering the local patent applications and registrations, which are around 10th to 15th place in the world. This is outstanding as Iran's national competitiveness is at a mediocre level of 70th place in the world. Although the patent applications or registrations of foreigners are not as high as the local standing, they are still favorable in terms of national competitiveness. Nevertheless, a big problem still remains and that is the competitiveness of securing overseas patents. This has not improved for decades and its global level is lagging behind compared to the overall national average. This must be actively improved in terms of developing IP policies in Iran.

(2) Trademark Competitiveness in Iran

The local trademark applications of Iran (local applicants) show that there were 11,784 in 2002 and the number increased 4.4-fold to 51,662 in 2016. The world ranking of the applications was at 13th place from the previous 22nd place. The local trademark application competitiveness is in an outstanding level that is similar to the local patent application competitiveness marked at 10th to 15th place in the world ranking. The trademark applications by foreigners were 1,239 in 2002, but the number was increased 4.4-fold to mark 5,403 in 2016. The world ranking of the applications was greatly increased from the 100th to 44th place. The increase in trademark applications by the locals is similar to the increase of trademark applications by foreigners. There were 34 overseas trademark applications in 2002 but the number increased 61-fold to mark 2,074 applications in 2016. In terms of the amount of applications, the improvement was significant and the competitiveness in the global market was increased to 71st place in 2016 from 102nd place in 2002. The local trademark application competitiveness is fairly high even in the global market, but overseas applications are not as good as the local applications. The focus must be in quantitative aspect and global competitiveness growth for the overseas trademark applications.

In Iran, SMEs are submitting more applications in the market and trademark disputes are increasing. However, because of inadequate laws and policies related to the applications and the example in the following, remedies on IP problems are not easy.

In 2011, a trademark of company B (trademark B) was registered to the Iran Industrial Property Office, but company A already registered a similar trademark (trademark A) in 2009. Therefore, company A asserted a claim of invalidity to the office on trademark B and raised an objection during its statutory period. The investigation committee of the Iran Industrial Property Office examined evidence and certificates about similarities between trademark A and trademark B, submitted by company A. However, the objection was denied for lack of evidence.

[Table 2-37] Global trademark application competitiveness of Iran (2002–2016)

Year	Local Trademark Application				Overseas Trademark Application	
	Local		Foreigner		Application	World Ranking
	Application	World Ranking	Application	World Ranking		
2002	11,784	22	1,239	100	34	102
2003	7,468	32	1,294	96	179	91
2004	17,608	20	3,042	77	898	53
2005	20,440	19	3,640	67	930	55
2006	23,827	17	3,982	63	483	79
2007	28,604	17	4,334	64	899	74
2008	30,711	16	3,939	65	1,081	69
2009	23,465	20	3,834	50	988	73
2010	25,388	19	4,130	51	1,603	68
2011	26,825	18	4,340	51	786	87
2012	24,879	18	3,977	54	1,153	76
2013	31,732	18	7,235	36	1,128	77
2014	1	142	2,694	72	1,260	83
2015			2,903	64	1,980	70
2016	51,622	13	5,403	44	2,074	71

Source: WIPO Statistics Database (2017), reorganized

We will now discuss the trademark registration competitiveness in Iran. The locals had 3,571 registrations in 2002 and the number increased sixfold to 21,770 in 2016. The world ranking for the registrations became 15th from 31st place previously. This is similar to the local trademark application competitiveness in terms of global ranking. The trademark registrations of foreigners were 917 in 2002 and the number increased sevenfold to 6,519 in 2016. The world ranking for the registration greatly increased in the same period, from 91st to 37th place, way above the national comprehensive competitiveness of Iran. The overseas trademark registration showed a similar trend that only one registration of overseas trademark happened in 2002 but there were 1,874 registrations in 2016. This was almost a 2,000 times increase in terms of quantity, but the world ranking showed that there was not much change in the competitiveness, but the ranking increased to 62nd place in 2016 from 81st place in 2015, and was only at 109th place in 2002.

[Table 2-38] Global trademark registration competitiveness of Iran (2002–2016)

Year	Local Trademark Registration				Overseas Trademark Registration	
	Local		Foreigner		Registration	World Ranking
	Registration	World Ranking	Registration	World Ranking		
2002	3,571	31	917	91	1	109
2003	5,236	26	1,320	84	85	93
2004	7,616	20	2,727	65	31	94
2005	9,256	18	4,046	58	1,153	48
2006	9,500	20	4,064	58	812	64
2007	8,801	23	4,325	55	462	78
2008	7,989	27	4,350	60	1,556	62
2009	6,617	29	3,727	55	770	76
2010	8,222	31	3,816	50	1,572	65
2011	10,175	28	4,345	48	972	74
2012	10,663	25	4,150	55	722	82
2013	7,102	33	3,406	67	874	79
2014			3,016	69	1,435	76
2015	1	121	3,959	51	2,062	63
2016	21,770	15	6,519	37	1,874	62

Source: WIPO Statistics Database (2017), reorganized

In summary, the trademark competitiveness of Iran is considerably high, with the local trademark applications and registrations at 10th to 15th place in the world. This shows similar aspect to the local patent applications and it is high compared to the national competitiveness of Iran. The trademark applications and registrations of foreigners are not as high as the local, but they are still favorable in terms of the national competitiveness of Iran. However, the competitiveness of the foreign trademark registrations is low, and this suggests that the qualitative growth has been weak compared to the quantitative growth, so active reviews on the quality side are necessary. Overall, Iran has huge differences on patent competitiveness locally and abroad, but this is less when it comes to trademark competitiveness.

(3) Industrial Design Competitiveness in Iran

The industrial design is valuable to Iran's IP. First of all, the local industrial design applications in Iran show 3,699 applications in 2010 when the international statistic data started, but this increased 4.2-fold to 15,811 applications in 2016. As for the world ranking, which is the most significant data to consider, the industrial design application competitiveness came at 5th place in 2016 from its 11th place in 2010. At this point, Iran reached the so-called IP Five.¹⁰⁰⁾ As for the local industrial design application competitiveness, it is one of the best in the world and the highest number in IP activities in Iran. The industrial design applications of foreigners did not change much and there were 168 in 2016 compared to 157 in 2010. The world ranking did not change much as well, from 47th to 51st place.

There was only one overseas industrial design application in 2002, and it increased to 25 applications in 2016. However, the world ranking of the application fell greatly to 105th place in 2016 from 76th place in 2002. This is one of the lowest IP activity indexes in Iran.

[Table 2-39] Global industrial design application competitiveness of Iran (2002–2016)

Year	Local Industrial Design Application				Overseas Industrial Design Application	
	Local		Foreigner		Application	
	Application	World Ranking	Application	World Ranking	Application	World Ranking
2002					1	76
2003					33	56
2004					1	92
2005						
2006					27	73
2007					27	79
2008					4	94
2009					55	72
2010	3,699	11	157	47	7	90
2011	4,089	10	203	45	5	100
2012	3,528	10	231	43	31	87
2013	4,632	9	193	57	5	99
2014	8,772	6	92	63	59	84
2015					43	87
2016	15,811	5	168	51	25	105

Source: WIPO Statistics Database (2017), reorganized

100) IP Five: The Intellectual Property 5 that take over 80% of the patent applications in the world. It also means the consultative group (established in 2007) of five countries (areas), including Korea, the United States, China, Japan, and Europe.

What needs to be focused on here is that the local industrial design application competitiveness is one of the best in the world, but the overseas industrial design applications are not even close to the national competitiveness average and even beyond the 100th place in the world. The government of Iran must review this as soon as possible.

Next is the industrial design registration competitiveness in Iran. The registrations of local people were 2,300 in 2010 but increased 2-fold to mark 5,091 registrations in 2016. The world ranking was increased from the 12th place to the 8th place. This is similar to the local industrial design application competitiveness of local people. The industrial design registrations of foreigners show unexpected results. There were 42 registrations in 2010 but it decreased to 35 registrations in 2016. The world ranking was also decreased to the 90th place from the 67th place. This is much less than Iran's comprehensive national competitiveness. In case of the oversea industrial design registrations, bigger problems occurred. There were only 17 oversea industrial design registrations in 2003 and the number plunged to 10 registrations in 2016. The world ranking on this was decreased to the 108th place in 2016 from 57th place.

[Table 2-40] Global industrial design registration competitiveness of Iran (2002–2016)

Year	Local Industrial Design Registration				Overseas Industrial Design Registration	
	Local		Foreigner		Registration	World Ranking
	Registration	World Ranking	Registration	World Ranking		
2002						
2003					17	57
2004						
2005						
2006					25	71
2007					27	79
2008					2	96
2009					82	61
2010	2,300	12	42	67	3	94
2011	1,909	15	38	73	2	95
2012	1,457	15	62	71	31	78
2013	1,769	16	143	56	19	90
2014	3,164	9	104	64	2	106
2015					74	72
2016	5,091	8	35	90	10	108

Source: WIPO Statistics Database (2017), reorganized

In summary, the local industrial design competitiveness in Iran is one of the best in the world, but the overseas industrial designs are the weakest points. The government of Iran must exert efforts to reduce the differences in IP areas, especially in the industrial design locally and abroad.

(4) Utility Model Competitiveness in Iran

The overall activities on utility model in Iran is difficult to comprehend. International statistics on local applications is not available and there are only less than 10 overseas applications every year, therefore it is difficult to find significant policy implications on them. However, in terms of the general characteristics of IP, utility models are less important to countries compare to patent and trademarks. So, this report will not cover more details on utility models.

4. Policy Recommendations for the Government of Iran

A. Connection of the SME Development Policy and Intellectual Property Policy

SMEs are supporting the industrial basis of Iran and local economies. Moreover, SMEs are being expected in terms of creating future industries. Such SMEs would manage and use IP well to increase the efficiency and profitability of businesses as well as decrease various risks. The basic goal of the IP strategy is to maintain market shares and profitability in high levels by understanding market demands, proceeding R&D, providing products to the market along with stopping other companies to enter the market using IP, as well as standing in the position where companies can lead the market on price and other aspects. It is important to claim IP in appropriate periods and ways to maximize the current business outcomes (acquiring profit, improving brand images, etc.) and use it in appropriate ways. The use of IP is usually requested to reflect its details to the business strategy of a company.

For SMEs to develop in various and vibrant ways, choice and concentration, as well as making tangible into intangible assets, are necessary. Therefore, companies must recognize the importance of various IPs so they could be used on strategic acquisition and utilization.

Although most SMEs have innovative technologies that would sustain their businesses, their awareness on protecting the technologies as IP and utilization are very low. In comparison to large companies, SMEs do not have sufficient systems for IP usage. The government must provide necessary support for SMEs on creating, protecting, and utilizing IP. along with raising experts in their areas.

In this sense, the SME policies of Iran must be improved heavily to promote SMEs with IP perspective, just like the report discussed previously. As the related SME support policies

are lagging behind the overall competitiveness of Iran, policies for the SMEs in Iran must be enhanced first. To achieve the goal of this report, the development of SME policies in the IP perspective, what the government of Iran must have is a strong will to provide support policies to raise SMEs. In that sense, this report will suggest five directions to connect the SME policies of Iran and IP policies.

[Table 2-41] SMEs and IP policy development directions in Iran

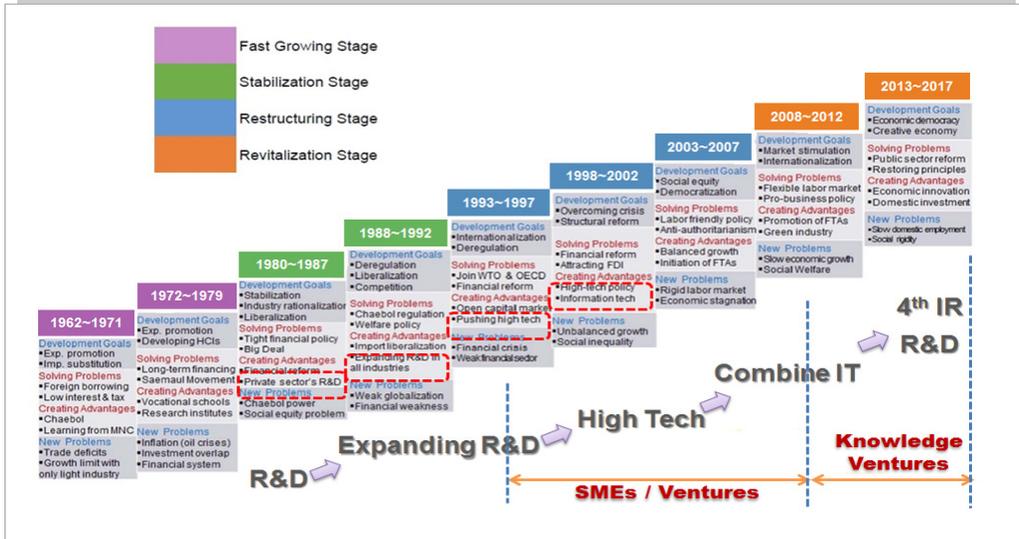
Policy Direction	Policy Development Direction
Policy Direction 1	Officially announcing the connection of SME policies and IP policies
Policy Direction 2	Preparing the IP-oriented road map for supporting SME policies
Policy Direction 3	Improving policies that are tailored to the levels and stages of SMEs
Policy Direction 4	Preparing evaluation and policy feedback systems on policy support outcomes
Policy Direction 5	Expanding opportunities for learning and exchanging advanced foreign technologies

B. Creating the SME R&D Environment for Developing Intellectual Property

Next, to raise SMEs that focus on IP, the R&D environment where IP can be vigorously created must be made. As most IPs are based on R&D, the R&D innovation is the priority to acquire various quality IP. Fortunately, the R&D capabilities of Iran have great potential. This strength must be used to build the R&D innovative ecosystem that covers the entire industries of Iran, and IP policies of choice and concentration must be followed after.

In the case of Korea, the national R&D environment was built in the 1980s and has been expecting the environment since. As Korea experienced the IP developments in the continued innovations, the government of Iran shall actively benchmark the experience of Korea for future developments.

[Figure 2-14] Development process of Korean R&D-technological innovation-IP



To build the R&D environment to invigorate the IP creation, the report recommends the following six policy directions. If the R&D infrastructures supported by the government of Iran are used well here, the directions would be implemented without a cost to the government's budget.

[Table 2-42] Policy directions on building R&D environment for IP creation in Iran

R&D Policy Direction	R&D Policy Direction
R&D Policy Direction 1	Developing the medium and long-term as well as comprehensive (technology, patent and company) R&D support policies
R&D Policy Direction 2	Preparing the standard process of the government R&D support policies
R&D Policy Direction 3	Developing and enhancing the R&D support policies for major universities
R&D Policy Direction 4	Developing and enhancing the R&D support policies for SMEs only
R&D Policy Direction 5	Choice and concentration on the technology-intensive SMEs
R&D Policy Direction 6	Installing technology support centers and business incubation centers in major industrial cities
R&D Policy Direction 7	Developing technological innovation and IP connecting support policies

C. Reflecting the Patent Information Utilization Process on the R&D Development Policy of the Government of Iran

The government-led R&D tasks must be divided into “newborn, growth, stable, and degrade” stages using the global patent information, and they must be used in developing the areas for choice and concentration. To do so, the related departments must reflect the stages in their regulations and use them actively.

The OECD has been studying the technology prediction methods using the patent information and distributing them to the government departments and private institutes by cooperating with the United States, Japan, and other governments since 1980s. Therefore, utilizing the related international institutions can be very effective. Iran must develop and draw out priority areas, prioritize the drawn technologies, reflect the information to the Critical System Requirement (CSR) and the goal-selecting strategy, as well as provide the information to SMEs by using the market trend, technological level, and patent information about the technologies that Iran currently needs.

In detail, the prior patent technology searches must be supported in the research task selection stage. ① The task proposer must be supported with the prior patent technology search funds to provide a service that allows the researchers to understand the research areas. ② The related policies and procedures must be improved for the task selection evaluators to compare distributed contents, proposed research details, and prior patent technology details while evaluating the prior patent research outcomes. ③ By allowing researchers to periodically search upon the prior patent technologies that were revealed after the selection of the research tasks, the value of patents that would become the final research outcomes must be maximized.

D. Preparing the Support Policy of Overseas Application Costs for SMEs

A policy that allows IP experts to join the final stage of R&D must be prepared to decide upon local patent applications or overseas patent applications of the research outcomes and support related expenses on applications. Although IP experts are to join the research task selection and midterm evaluation stage to claim IP for key technologies, patents must be thoroughly traced and managed through DB and other methods to make sure that they would not be overused. This is also about supporting the local patent applications and their maintenance costs after the end of research tasks. In doing so, claiming the rights of research outcomes would be accelerated.

Supporting the overseas application costs will prioritize SMEs and the next support will be for universities that participate in the government R&D. Supporting all related necessary expenses is burdensome in terms of the budget. Therefore, the most efficient way would

be by fully funding the technologies that are important for the country and having SMEs pay certain portion of the costs (10%-30%) for other technologies.

Supporting all IP is impossible. The support shall be focused on outstanding research outcomes but the policy must be designed to retrieve some of the sales from the SMEs and reinvest them to the system. It is also important to provide differential support on global application costs (S: applications in three countries, A: applications in two countries, B: application in one country) depending on the excellence of technologies and their importance. Especially as the previous contents suggested, Iran must prioritize the acquisition of oversea industrial designs.

E. Supporting the Intellectual Property Management on Technology-Intensive SMEs

The policies must support IP management consultations for SMEs with excellent research capabilities. In doing so, the IP creation, management, and utilization capabilities of SMEs must be improved. IP management requires a high level of expertise. But because SMEs with weak capital basis cannot build dedicated departments for IP, the consulting costs should be fully funded for at least three years, with 75% support for 4 to 5 years, 50% support for 6 to 7 years, and the support should be stopped starting from 8 years to raise SMEs' abilities to manage on their own. As there will be not much of experts available related to this issue in Iran, the government may consider being supported by experts from Korea, Japan, and other countries with experience in IP through international cooperation.

F. Supporting Intellectual Property Expert Training and Internationalization

The support policy raises global IP experts well equipped with the knowledge about the international IP laws, including the US and Japan laws for lawyers, patent attorneys, government, large companies, universities, and other IP experts. This would require commissioned training of more than a year (excluding short-term training) at the overseas institutions and universities while the curriculum is developed and operated with the IP experts of the United States, Japan, Europe, China, and other regions. The first three years of training will be free of charge, but IP consultation duties will be given after the completion of training. This will be effective to raise the IP competitiveness of Iran's SMEs.

Chapter 4. Policy Study to Strengthen Iran's Copyright Protection

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 - C. Fair Use
 - D. Penalty for Copyright Infringement
4. Education to Raise Awareness of Copyright
 - A. Overview
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5. Policy Recommendations

1. Need to Revise the Copyright Act of Iran and Strengthen Protection

The copyright law of Iran is the Act for Protection of Authors', Composers' and Artists' Rights, which was enacted on January 12, 1970. The Act is still applied except for one revision regarding the extension of the copyright protection period. Iran became a member of the World Intellectual Property Organization (WIPO) in 2001, but it has not joined copyright-related international agreements at present.

The Act, which was enacted in 1970 and has not been revised for a long time, is deemed inappropriate to catch up with the rapid development of information and communications technologies and has some parts that do not meet the international standards for copyright protection. In addition, the Act is insufficient to protect the economic rights of copyright holders and ineffective to safeguard the rights of Iranian right holders and prevent illegal copying (of publication). The Internet technology started to grow rapidly from the 1980s and web-technology based services began in the 1990s. Therefore, it is difficult for the Act, established in 1970, to reflect such technological change, meaning it is hard to regulate online copyright infringement.

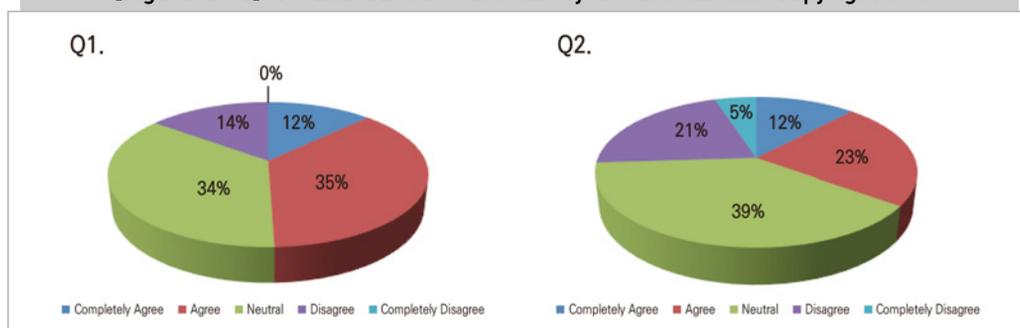
Because Iran is not a member of copyright-related international agreements, it does not bear an obligation to protect copyrights. That creates an environment where Iranian copyright holders cannot be protected when their work is published abroad and overseas work cannot be protected in Iran.¹⁰¹⁾ Under the current Act, works published abroad are not subject to protection and overseas right holders do not have any right to take action when their works are translated or published in Iran without their permission. It is common in Iran that translated works are published without copyright holders' awareness or republished under a different title when a new work is created by illegal copying or making an excerpt from original works without the copyright holders' permission.¹⁰²⁾ It may not only hinder boosting the Iranian publication industry but have a negative impact on foreign investment.¹⁰³⁾ In particular, the circumstances of Iran contain triggers a conflict in the area of trade as foreign works are not protected in the country at a time when local industries are promoted and international transactions are on the rise. In addition, Iran's lukewarm attitude to copyright protection is not helpful in enhancing the country's international reputation.¹⁰⁴⁾

2. Movement to Revise the Iranian Copyright Act

Discussion on the need for the revision of the copyright act has already started in Iran and a detailed survey was conducted on Iranian publishers.

1. Regarding the question on whether the current Copyright Act infringes the rights of Persian authors, 52% of respondents answered yes while only 14% said no.
2. Regarding the question about whether the current Copyright Act is effective to protect Iranian works in other countries, 35% of respondents answered the Act impedes the exercise of their rights while 26% said the Act does not their rights.

[Figure 2-15] Q1 and Q2 from the survey on the current Copyright Act



101) Shahimeh Sadat Hosseini, A Review on the Status of Copyright in Iran's Publication Industry: Studying Tehran Publishers' View, Middle-East Journal of Scientific Research 16 (3): 383-391, 2013, p. 386.

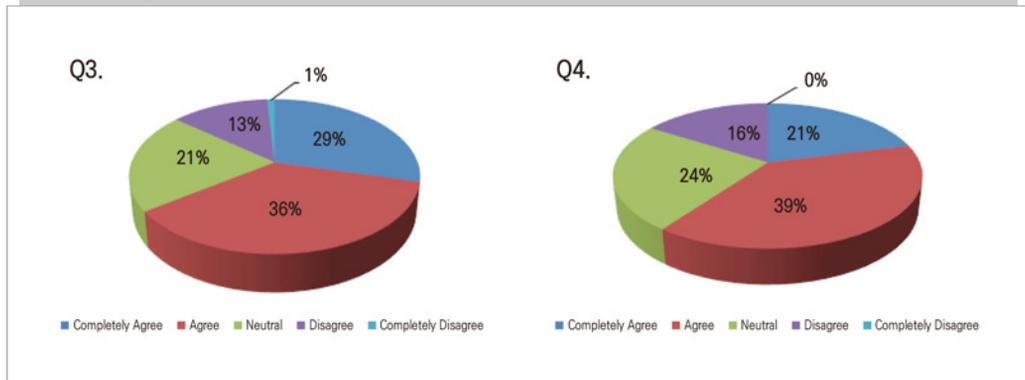
102) Ibid., p. 385.

103) Ibid., p. 386.

104) Ibid., p. 388.

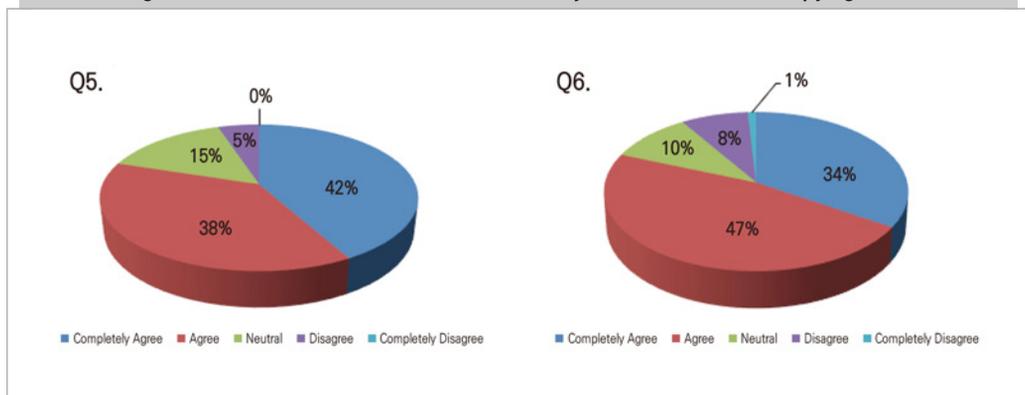
3. Regarding the question on whether the current Copyright Act and situation where Iran is not a member of international agreements undermine international protection of Iranian works, 65% of respondents answered yes while 14% said no.
4. Regarding the question on whether the current Copyright Act is a stumbling block not only to Iran's local publishing industry but also to attracting foreign investment, 60% of respondents answered the Act has a negative impact while only 16% said no.

[Figure 2-16] Q3 and Q4 from the survey on the current Copyright Act



5. Eighty percent of respondents answered that the current Copyright Act, which fails to meet the international standards, has a negative impact on the international reputation of Iran in the areas of culture and art while 5% said otherwise.
6. A whopping 81% of respondents answered that the current Copyright Act is incomplete and outdated while just 9% said otherwise.

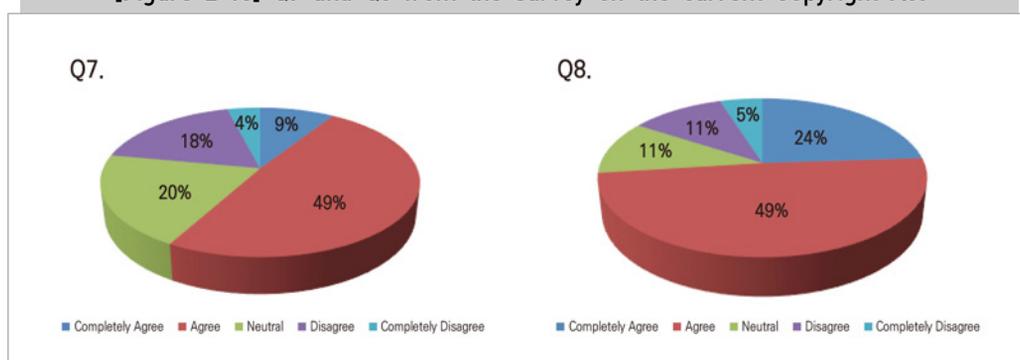
[Figure 2-17] Q5 and Q6 from the survey on the current Copyright Act



However, despite the awareness of the negative impact of the current Copyright Act, some argue that the situation where Iran's copyright system does not meet the international standards can provide economic benefits.

7. Fifty-eight percent of respondents answered that the situation where Iran's copyright system does not meet the international standards can be economically beneficial to buyers of translated books while 22% said otherwise.
8. Seventy-three percent of respondents answered that the current Copyright Act consequently helps reduce fees for translated works as they do not need to pay copyright fees to foreign publishers or authors while only 16% said otherwise.

[Figure 2-18] Q7 and Q8 from the survey on the current Copyright Act



In line with the consensus in Iran on the problem of the outdated Copyright Act and the need for revision, the minister of the Ministry of Communication and Information Technology of Iran directed the parliamentary research center and other relevant agencies to conduct a research on a new copyright system to be submitted to the parliament.¹⁰⁵⁾ In addition, the Iranian government is having a discussion on joining copyright-related international agreements. Therefore, based on the Korean Copyright Act, we would like to provide a direction for the revision of the Iranian Copyright Act to address various copyright-related issues resulting from technological change.

3. Comparative Analysis of Iranian and Korean Copyright Acts

Compared to the Korean Copyright Act of around 130 articles, the Iranian copyright act, which has 33 articles, is believed yet to be concretized or to have many unaddressed issues.

105) Iran: New Copyright Law to Be Submitted to Parliament:
<http://www.loc.gov/law/foreign-news/article/iran-new-copyright-law-to-be-submitted-to-parliament/>

A. Author and Work

Article 1 of the Iranian Copyright Act defines authors as writers, composers, and artists, and work as the product of their knowledge, originality or art, irrespective of the method used therein. Work means everything that is creative, including books, poems, music, dramas, cinematographic works, art, architectural works, photographic works, works of applied art, and functional works.

[Table 2-43] Comparison of Iranian and Korean Copyright Acts - author and work

Iranian Copyright Act	Korean Copyright Act
<p>Article 1. All writers, composers, and artists will hereafter be called "author," and the product of their knowledge, originality, or art, irrespective of the method used therein, will hereafter be called "work."</p> <p>Article 2. Works protected by copyright law are as follows:</p> <ol style="list-style-type: none"> 1. Books, pamphlets, plays, and all other literary, scientific, and artistic writings 2. Poems, songs, and anthems, irrespective of the way they are written, recorded, or broadcast 3. Audiovisual works for stage or screen performances or for broadcasting by radio and television, irrespective of the way they are written, recorded, or broadcast 4. Musical works irrespective of the way they are composed, recorded, or broadcast 5. Paintings, pictures, drawings, designs, decorative writings, geographical maps, or any decorative and imaginative work produced in any simple or complex manner 6. Sculptures of all types 7. Architectural works, designs, sketches, and buildings. 8. Photographic works produced by any original methods 9. Original articles of applied handicraft and industrial art, carpet, and rug designs 10. Original works based on folklore and national heritage of culture and arts 11. Technical works of originality 12. Any other original works produced from combinations of the aforementioned works 	<p>Article 2 (Definitions) The terms used in this Act shall be defined as follows:</p> <ol style="list-style-type: none"> 1. The term "work" means a creative production that expresses human thoughts and emotions; 2. The term "author" means a person who creates a work; 4. The term "performer" means a person who gives a stage performance by expressing works through acting, dancing, musical playing, singing, narrating, reciting, or other artistic means, or by expressing things other than works in a similar way, including a person who conducts, directs, or supervises a stage performance; 6. The term "phonogram producer" means a person who makes an overall plan and takes charge of producing an original phonogram; 9. The term "broadcast organization" means a person who engages in broadcasting business; <p>Article 4 (Examples of Works) (1) The following shall be the examples of works referred to in this Act:</p> <ol style="list-style-type: none"> 1. Novels, poems, theses, lectures, speeches, plays, and other literary works; 2. Musical works; 3. Theatrical works including dramas, choreographies, pantomimes, etc.; 4. Paintings, calligraphic works, sculptures, printmaking, crafts, works of applied art, and other works of art; 5. Architectural works including buildings, architectural models, and design drawings; 6. Photographic works (including those produced by similar methods); 7. Cinematographic works; 8. Maps, charts, design drawings, sketches, models, and other diagrammatic works; 9. Computer program works.

B. Copyright

The Iranian copyright act states that an author has exclusive rights to publish, broadcast, perform, and publicize works and further rights to any financial and intellectual profits resulting from his or her work or name. Such broad and abstract provisions of the Iranian Copyright Act are different from the Korean Act, which is based on definite and specific act control. In addition, it is not clear whether the exclusive Iranian provisions may apply to acts using ICT, such as transmission.

An author's moral rights have no place or time limit and are not transferable. This provision is also not clear whether it prescribes inalienability of author's moral right or is to protect moral right after death.

An author's property right is transferable. What is unique about the Iranian copyright act is that it presents examples of copyright transfer, such as production of films for cinema, television, and the like; stage performances, as in theater, ballet, or other such performances; recording of a work by sound or vision on tapes; broadcast by radio and television; translation; and reproduction. The act prescribes that copyright is transferable when making use of the work in any scientific, literary, artistic, technical, and advertising purposes, as well as in producing or creating other works (secondary works). This is different from the Korean Act, which clearly clarifies the right of reproduction and the like. The Iranian Act does not clearly state how to handle secondary works or making use of works in scientific or other purposes.

Work produced by the collaboration of two or more authors is not separable or distinct and the rights arising from there need to be treated as the communal rights of the authors. Copyright is protected for 50 years after the author's death.

[Table 2-44] Comparison of Iranian and Korean Copyright Acts - copyright

Provisions of the Iranian Copyright Act	Provisions of the Korean Copyright Act
	<p>Article 10 (Copyright)</p> <p>(1) The author shall hold the rights under Articles 11 through 13 (hereinafter referred to as "author's moral right") and the rights falling under Articles 16 through 22 (hereinafter referred to as "author's economic right").</p> <p>(2) A copyright shall commence from the time of its creation and shall not require a fulfillment of any procedures or formalities.</p>

[Table 2-44] Continued

Provisions of Iranian Copyright Act	Provisions of Korean Copyright Act
<p>Article 3. Author's rights include exclusive right to publish, broadcast, perform and publicize works, and further right to any financial and intellectual profit resulting from his work or name.</p>	<p>Article 11 (Right to Make Public) Article 12 (Right of Paternity) Article 13 (Right of Integrity) Article 14 (Inalienability of Author's Moral Right) Article 15 (Author's Moral Right to Joint Work) Article 16 (Right of Reproduction) Article 17 (Right of Public Performance) Article 18 (Right of Public Transmission) Article 19 (Right of Exhibition) Article 20 (Right of Distribution) Article 21 (Right of Rental) Article 22 (Right of Production of Derivative Works) Article 64 (Protected Performance, Phonogram, and Broadcast)</p>
<p>Article 4. Author's intellectual rights have no place or time limit and are not transferable.</p>	<p>Article 64 (Protected Performance, Phonogram and Broadcast) Article 66 (Right of Paternity) Article 67 (Right of Integrity) Article 68 (Inalienability of Performer's Moral Rights) Article 69 (Right of Reproduction) Article 70 (Right of Distribution) Article 71 (Right of Rental) Article 72 (Right of Public Performance) Article 73 (Right of Broadcasting) Article 74 (Right of Interactive Transmission) Article 75 (Remuneration by Broadcasting Organizations to Performers) Article 76 (Remuneration by Digital Audio Transmission Organizations to Performers) Article 76-2 (Remuneration to Performers by Persons Doing Public Performance Using Commercial Phonograms) Article 77 (Joint Performers)</p> <p>SECTION 3 Rights of Phonogram Producers</p> <p>Article 78 (Right of Reproduction) Article 79 (Right of Distribution) Article 80 (Right of Rental) Article 81 (Right of Interactive Transmission) Article 82 (Remuneration to Phonogram Producers by Broadcasting Organization) Article 83 (Remuneration to Phonogram Producers by Digital Audio Transmission Organization) Article 83-2 (Remuneration to Phonogram Producers by Persons Performing in Public Using Commercial Phonogram)</p>

[Table 2-44] Continued

Provisions of Iranian Copyright Act	Provisions of Korean Copyright Act
	SECTION 4 Rights of Broadcasting Organization Article 84 (Right of Reproduction) Article 85 (Right of Simultaneous Broadcasting) Article 85-2 (Right of Public Performance) SECTION 5 Term of Protection for Neighboring Right Article 86 (Term of Protection)

C. Fair Use

Regarding fair use, the Iranian Copyright Act prescribes that acts of quoting, criticizing and praising, and copyright is limited in the case of acts of public libraries, documentation centers, educational establishments, and the like. Compared to the Korean copyright system, Iran's provisions on fair use are abstract and ambiguous.

[Table 2-45] Comparison of Iranian and Korean Copyright Acts - fair use

Provisions of the Iranian Copyright Act	Provisions of Korean the Copyright Act
<p>Article 7. It is permissible to quote from published works and to refer to them for literary, scientific, technical, or educational purposes, and in criticism or praise, provided that the sources of quotations are mentioned and the customary limitations are observed.</p> <p>NB. Mentioning the sources of quotations, in cases where the work is reproduced for use in educational institutions by teachers employed thereat, is not necessary, provided there is no monetary gain involved.</p> <p>Article 8. Public libraries, documentation centers, scientific institutions, and educational establishments, which are noncommercial, may reproduce protected works by a photographic or similar process, in the numbers necessary, for the purposes of their activities, according to a decree to be issued by the Board of Ministers.</p>	<p>Article 23 (Reproduction for Judicial Proceedings, etc.) Article 24 (Use of Political Speech, etc.) Article 24-2 (Free Use of Public Works) Article 25 (Use for the Purpose of School Education) Article 26 (Use for News Reporting) Article 27 (Reproduction, etc. of News Articles or Editorials) Article 28 (Quotation from Works Made Public) Article 29 (Public Performance and Broadcasting for Non-Profit Purposes) Article 30 (Reproduction for Private Use) Article 31 (Reproductions, etc. in Libraries, etc.) Article 32 (Reproduction for Examination Questions) Article 33 (Reproduction, etc. for the Visually Impaired, etc.) Article 33-2 (Reproduction, etc. for the Hearing Impaired, etc.) Article 34 (Ephemeral Sound or Visual Recordings by Broadcasting Organization)</p>

[Table 2-45] Continued

Provisions of the Iranian Copyright Act	Provisions of the Korean Copyright Act
Article 9. With the passing of this law, the Ministry of information will retain the right to use any works it has already reproduced and published.	Article 34 (Ephemeral Sound or Visual Recordings by Broadcasting Organization)
Article 10. With the passing of this law, the Ministry of Education will retain the right to use any school books already printed and issued in agreement with the appropriate existing laws.	Article 35 (Exhibition or Reproduction of Works of Art, etc.)
Article 11. Reproduction of works protected by this law, as mentioned in Article 2, section 1, and the recording of radio and television program are permissible, but only for private and noncommercial use.	Article 35-2 (Temporary Reproduction in Course of Using Works, etc.)
	Article 35-3 (Fair Use of Works, etc.)
	Article 36 (Use by Means of Translation, etc.)
	Article 37 (Indication of Sources)
	Article 37-2 (Exclusion from Application)
	Article 38 (Relationship with Author's Moral Rights)

D. Penalty for Copyright Infringement

Those who infringe on copyright by publishing, distributing, or broadcasting will be condemned to imprisonment for a period no less than six months and no more than three years. Those who reproduce, distribute, or publish another person's translation will be condemned to imprisonment for a period no less than three months and no more than one year. Such light sentences regarding translation seem to reflect that Iran has promoted cultural and technological development by translating and using foreign works under international sanctions. There are other penalties as well.

[Table 2-46] Comparison of Iranian and Korean Copyright Acts - penalty for copyright infringement

Provisions of the Iranian Copyright Act	Provisions of the Korean Copyright Act
Article 23. Whosoever publishes, distributes, or broadcasts the whole or part of another person's work, which is protected by this law, in his own name or in the name of the author without permission, or in the name of a person he knows to be other than that of the author, shall be condemned to corrective imprisonment for a period of no less than six months and no more than three years.	<p>Article 39 (Principles of Copyright Term)</p> <p>(1) The author's economic right to a work shall continue to subsist during the lifetime of an author and until the end of a period of 70 years after the death of the author, unless otherwise provided in this sub-section.</p> <p>(2) The author's economic right to a joint work shall continue to subsist for a period of 70 years after the death of the last surviving co-author.</p> <p>Article 136 (Penalty Provisions) (1) Any person who falls under any of the following subparagraphs may be punished by imprisonment with labor up to five years or by a fine up to 50 million won, or may be punished by both:</p>

[Table 2-46] Continued

Provisions of the Iranian Copyright Act	Provisions of the Korean Copyright Act
<p>Article 24 Whosoever prints, publishes, or distributes another person's translation in his own name without permission, shall be condemned to corrective imprisonment for a period of no less than three months and no more than one year.</p>	<ol style="list-style-type: none"> 1. A person who infringes on author's economic right or other property rights protected pursuant to this Act (excluding the rights under Article 93) by means of reproduction, performance, public transmission, exhibition, distribution, rental, or production of derivative works; 2. A person who violates the court order under Article 129-3 (1) without justifiable grounds; (2) Any person who falls under any of the following subparagraphs shall be punished by imprisonment with labor for up to three years or by a fine up to 30 million won, or may be punishable by both: <ol style="list-style-type: none"> 1. A person who defames the honor of author or performer by infringing on author's or performer's moral rights; 2. A person who files for false registration pursuant to Articles 53 and 54 (including cases applied mutatis mutandis pursuant to Articles 90 and 98) deceitfully; 3. A person who infringes on the right of a database producer protected pursuant to Article 93 by means of reproduction, distribution, broadcasting or interactive transmission; 3-2. A person who violates Article 103-3 (4); 3-3. A person who violates Article 104-2 (1) or (2) for his/her own business or for profit; 3-4. A person who violates Article 104-3 (1) for his/her own business or for profit: Provided, that a person who, by negligence, has not known that such act causes or conceals the infringement of copyright or other rights protected pursuant to this Act shall be excluded here from; 3-5. A person who commits an act falling under subparagraph 1 or 2 of Article 104-4; 3-6. A person who violates Article 104-5; 3-7. A person who violates Article 104-7; 4. A person who commits an act deemed an infringement pursuant to Article 124 (1); <p>Article 137 (Penalty Provisions)</p> <ol style="list-style-type: none"> (1) Any person who falls under any of the following subparagraphs shall be punished by imprisonment with labor up to one year or by a fine up to ten million won: <ol style="list-style-type: none"> 1. A person who makes a work public under the real name or pseudonym of a person other than the author; 2. A person who publicly performs or publicly transmits a performance, or distributes copies of performance under the real name or pseudonym of a person other than the performer; 3. A person who violates Article 14 (2); 3-2. A person who conducts an act falling under subparagraph 3 of Article 104-4; 3-3. A person who violates Article 104-6; 4. A person who operates copyright trust service without obtaining permission pursuant to Article 105 (1); 5. A person who commits an act deemed an infringement pursuant to Article 124 (2);

[Table 2-46] Continued

Provisions of the Iranian Copyright Act	Provisions of the Korean Copyright Act
	<p>6. A person who obstructs the business of an online service provider by making a demand by intention for the suspension or resumption of a reproduction or interactive transmission under Article 103 (1) or (3), upon knowing that he/she had no legitimate authority;</p> <p>7. A person who violates Article 55-2 (including cases applied mutatis mutandis pursuant to Articles 90 and 98).</p> <p>(2) A person who attempts to commit a crime under paragraph (1) 3-3 shall be punished.</p> <p>Article 138 (Penalty Provisions)</p> <p>(1) Any person who falls under any of the following subparagraphs shall be punished by a fine up to five million won: <Amended by Act No. 11110, Dec. 2, 2011></p> <ol style="list-style-type: none"> 1. A person who violates Article 35 (4); 2. A person who fails to indicate the sources, in violation of Article 37 (including the cases applied mutatis mutandis pursuant to Articles 87 and 94); 3. A person who fails to the holder of author's economic right, in violation of Article 58 (3) (including cases applied mutatis mutandis under Articles 63-2, 88 and 96); 4. A person who fails to notify the author, in violation of Article 58-2 (2) (including cases applied mutatis mutandis under Articles 63-2, 88 and 96); 5. A person who engages in a copyright agency or brokerage service without reporting pursuant to Article 105 (1), or who continues the services after receipt of an order to close the services pursuant to Article 109 (2).

4. Education to Raise Awareness on Copyright

A. Overview

Raising awareness on copyright through education is the most important in protecting copyright holders, to expand copyright-related markets as well as promote the cultural industry, which are the purposes of the copyright law. Korea has implemented a strong remedy for copyright infringement along with copyright education. The implementation has raised awareness on copyright in a short time on the positive side, but it also caused social confusion by generating numerous criminals who violate copyright.

There is a high number of criminal cases on copyright infringement. There were about 25,000 cases in 2007, but this number soared to 90,979 in 2008 and 89,410 in 2009. Then, the number suddenly dropped to 29,307 in 2010 and hovered around 30,000 to 40,000 from 2011 to 2013. Complaints against teenagers for copyright infringement exceeded 20,000 in 2008 and 2009 and the number is estimated to be about thousands of cases since 2010.¹⁰⁶⁾ One study shows that just the number of intellectual property-related crimes is more than 10 times larger than that of trademark right infringement and complaints account for an overwhelming majority of the cases. The number of complaints for copyright infringement in Korea is believed to be 900 times larger than that of the United States,¹⁰⁷⁾ which is a whopping number considering the population difference between both countries.

Table 2-47 shows that the number of copyright cases received increased sharply from the mid-2000s and they led to plenty of indictments. A large portion of them are suspension of indictment, which stemmed from the system of Suspension of Indictment under the Condition of Education on Copyright.

106) Data from Supreme Prosecutors' Office. Discussion on Revision of Copyright Act to Prevent Settlements Business (Feb. 15, 2016), p. 146.

107) Hee-Sop Nam, National Assembly Discussion and Issues on Revision of Copyright Act to Prevent Settlements Business, Discussion on Revision of Copyright Act to Prevent Settlements Business, Data of Feb. 15, 2016, p. 33.

[Table 2-47] No. of copyright cases received and rate of indictment/non-indictment from 2005 to 2013

[기소/불기소 비율(건수)]

Year	No. of Case	Indictment			Non-indictment				
		Formal Trial	Abusive Indictment	Subtotal	Dismissal of Indictment	Absence of the Right of Arraignment	Suspension of Indictment	Others	Subtotal
2005	14,838 (290)	19 (0)	1,486 (19)	1,505 (19)	1,013 (19)	9,481 (155)	215 (33)	2,624 (64)	13,333 (271)
2006	18,227 (611)	23 (0)	1,473 (31)	1,496 (31)	1,445 (20)	11,426 (389)	1,865 (118)	1,995 (53)	16,731 (580)
2007	25,027 (2,832)	26 (0)	1,637 (76)	1,663 (76)	3,836 (313)	15,195 (1,865)	1,986 (376)	2,347 (199)	23,364 (2,753)
2008	90,979 (21,953)	8 (0)	3,975 (118)	3,983 (118)	12,446 (1,575)	51,255 (11,855)	16,520 (6,056)	6,775 (2,349)	86,996 (21,835)
2009	89,410 (22,169)	67 (0)	3,956 (17)	4,023 (17)	24,702 (13,707)	27,150 (2,936)	24,676 (4,243)	8,859 (1,266)	85,387 (22,152)
2010	29,307 (3,611)	147 (0)	3,740 (3)	3,887 (3)	5,447 (3,201)	10,829 (152)	5,102 (150)	2,102 (81)	23,480 (3,584)
2011	36,852 (4,577)	234 (0)	3,344 (5)	3,578 (5)	6,996 (5,354)	14,244 (199)	6,196 (253)	2,294 (58)	29,730 (5,864)
2012	46,359 (6,070)	173 (1)	3,810 (16)	3,983 (17)	11,097 (5,354)	14,356 (271)	7,594 (287)	3,116 (64)	36,163 (5,976)
2013	36,879 (2,860)	135 (0)	3,125 (5)	3,260 (5)	6,513 (2,477)	12,744 (176)	7,565 (147)	3,019 (35)	29,841 (2,835)
합계	387,878	833	26,836	27,669	105,515	184,678	83,382	37,300	410,875

(※ No. of minors in the parentheses)

B. Side Effects of Remedy for Copyright Infringement and Discussion in Korea

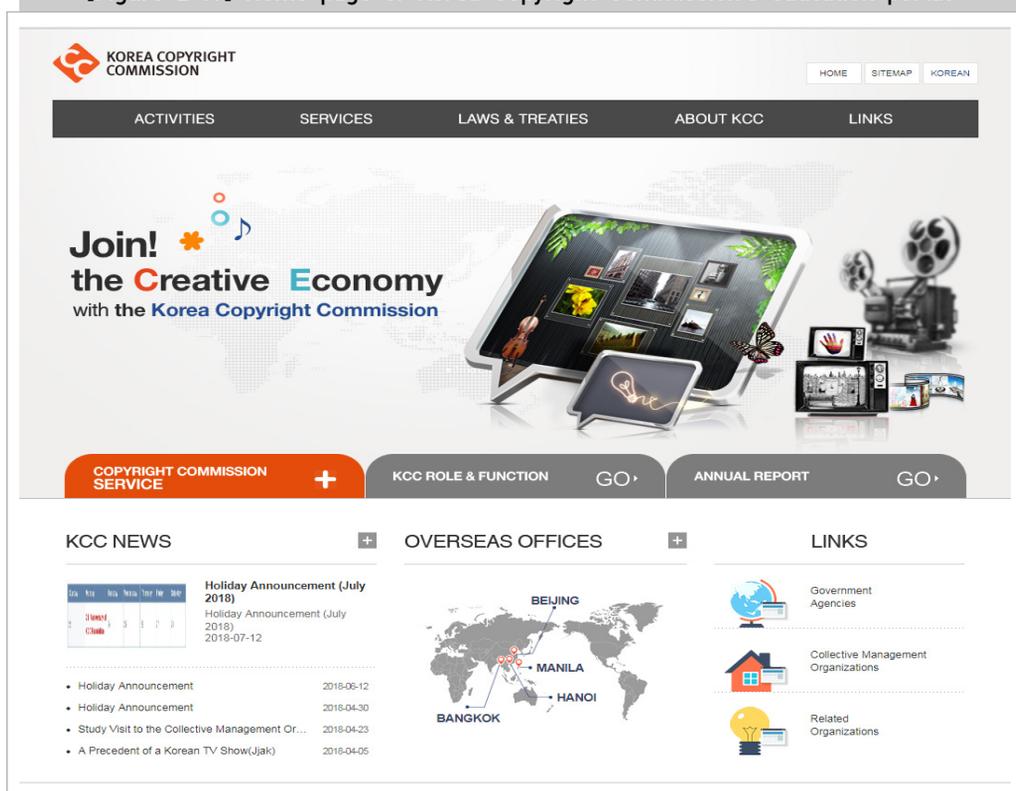
Regarding the social problems concerning the so-called “settlements business” by copyright holders, Paragraph 1 of Article 136 of the current Copyright Act has been criticized significantly. Countermeasures include reducing the area for offense indictable without complaint and excluding minor acts, whose amount of damage is below a certain level, from the component of the article. The second countermeasure, excluding minor acts from the component of the article,¹⁰⁸⁾ was scrapped because of concerns raised during discussions and public hearings at the National Assembly.

108) The measure passed the Education, Culture, Sports, and Tourism Committee on Apr. 24, 2014 during the 19th National Assembly, the content was to punish “acts for profits” (Item A of Subparagraph 1 of Paragraph 1 of Article 136 of revision) and “causing damage worth no less than KRW 1 million for six months based on retail price of reproduction of works” (Item B of Subparagraph 1 of Paragraph 1 of Article 136 of revision).

C. Benchmarking the Copyright Education by the Korea Copyright Commission

Korea has achieved an outstanding outcome in education on copyright protection. Especially, the Korea Copyright Commission (KCC) is at the center providing online and offline education as well as publishing educational materials. KCC also exerts efforts to offer user-tailored active education with on-site copyright education, hands-on copyright class, and others. Here we introduce the relevant website instead of explaining the extensive educational system of KCC.

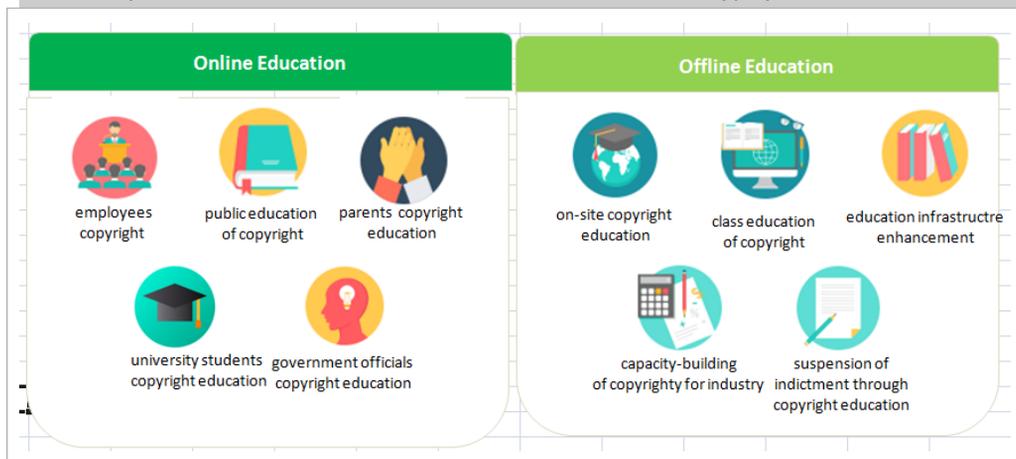
[Figure 2-19] Home page of Korea Copyright Commission's education portal



KCC has established a “copyright education center” for copyright education. The copyright education center, an institution in line with the policy to promote lifelong education, aims to 1) establish a foundation for lifelong education institute for the public, 2) offer tailored education considering special characteristics of users or organizations, 3) support the development of essential copyright job skills, and 4) develop and provide useful education content reflecting change in copyright act and relevant laws.

Figure 2-20 shows the online and offline education provided by KCC.

[Figure 2-20] Online and offline education of Korea Copyright Commission



5. Policy Recommendations

The Iranian copyright system was created in 1970, which is why the system has difficulty reflecting the technological change of the ICT era and the Copyright Act itself is ambiguous and abstract. On the contrary, although the Korean Copyright Act underwent a passive revision in the 1980s as a result of trade pressure from the United States, it has a history of proactive revision, thanks to the development of ICT since 1990. Such circumstances of Korea have many implications for the revision of the Iranian Act and cooperation is required.

Iran needs to actively consider joining the Berne Convention, Rome Convention, and WIPO-related agreements to ensure international protection of Iranian works and protection of foreign works' copyright in Iran. Under the current situation where Iran is not a member of copyright-related international agreements, it is hard to expect copyright protection from allies based on reciprocity, which can undermine the development of Iran's cultural industry. The international perception that Iran is passive in protecting intellectual property can have a negative impact on foreign companies' investment to Iran, which the country has been actively promoting since the lift of the economic sanctions. To address such problems, efforts need to be exerted to encourage Iran to revise its Copyright Act to meet the international standards and join international agreements. With these efforts, Iran should properly handle the copyright environment that is changing rapidly because of technological development and widespread Internet usage.

We also need to bear in mind that awareness of copyright has been low for a long time in Iran. There was a time in Korea where unauthorized reproductions of works were widely distributed without people knowing it was illegal. To raise the public's awareness of copyright to the current level, the Korean government has exerted a lot of efforts including

copyright education. We hope that Korea can contribute to strengthening the copyright infrastructure and promoting the cultural development of Iran by spreading its various copyright education systems to Iran.

Chapter 5. Study on Measures to Protect Traditional Iranian Products Using Geographical Indication

<Contents>

1. Need for Geographical Indication and Protection of Traditional Iranian Products
2. Concept of Geographical Indication
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 - B. Iranian Act to Protect Geographical Indication
5. Policy Recommendations

1. Need for Geographical Indication and Protection of Traditional Iranian Products

Geographical indication is a sign attached to products whose reputation, quality, and other characteristics essentially originated from geographical characteristics of a specific area. With the geographical indication, consumers can rely on reputation and quality of a specific area in selecting products. Meanwhile, producers can make an economic profit and contribute to the continuous production of special products and development of the area by attaching geographical indications to traditional products with long-standing quality and credibility in the area and selling the products.

It is important to protect Iranian products, such as Persian carpets, saffron, and pistachios, using geographical indications because they can not only have positive effects on economy, society, and culture, but also enhance the products' reputation and their international marketability.¹⁰⁹⁾ In particular, Iranian carpets are produced using skills that have been handed down through generations and have unique characteristics depending on the culture of a specific area, city, region, and the weaver's skill. The Iranian carpet is a handmade artwork that is woven using 500 to 1,000 different colored wools based on a design on a graph paper, called Nakhsheh.¹¹⁰⁾ The Iranian carpet requires diverse skills in

109) Pardis Moslemzadeh Tehrani et al., Urgency and Benefit of Protecting Iranian Carpets using Geographical Indications, *Journal of Intellectual Property Rights*, Vol. 18, January 2013, p. 72.

designing and weaving and takes several months to complete using best-quality wools that come from sheep raised in Iran. The carpet also boasts a unique feature of different knots and designs based on the location where the carpet is woven.¹¹¹⁾ Currently, carpets are made in more than 30,000 places in a professional manner, and major carpet-weaving areas in Iran include Mashhad, Tabriz, Esfahan, Turkmen, Nain, Kashan, Kerman, and Torbat Heidariyeh. Tabriz carpets, particularly, have a prominent position because of their vivid colors and fine weaving skills.¹¹²⁾

The export of Iranian carpets has decreased sharply under economic sanctions, and specific reasons for the decrease include local economic downturn, economic sanctions by the United States, and wage raise of weavers. Many weavers have left the industry because of low wages and poor environment. Dollar crisis and domestic inflation also hurt the export of Iranian carpets. In addition, other countries, like China, made the Iranian carpet market suffer greatly by imitating Iranian carpet designs and selling them at lower prices.¹¹³⁾

Iran still leads globally in terms of carpet exports. In the current situation, Iran should utilize the provisions of the convention. Most of the weavers have abandoned their jobs because of lack of protection and low wages. s that it has already acceded to register its intellectual property (IP). The Lisbon Agreement and the Madrid Convention regulations can be exploited to protect IP in the global market. In doing so, Iran must also consider other international agreements that it can accede to effectively protect its IP.

According to the Iranian laws and institutions of intellectual property, traditional products, such as carpets, can be protected by the copyright act and industrial property right act. As the Iranian Copyright Act includes “carpet and rug designs,”¹¹⁴⁾ carpet designers are allowed to exercise the exclusive rights given to copyright holders as long as they satisfy the requirements for work.¹¹⁵⁾ Design is divided into two: design on paper and design on a carpet. Therefore, the characteristic of design infringement may differ depending on whether the design on paper is copied and sold or design on a carpet is copied and sold.¹¹⁶⁾ Infringement on “carpet and rug design” of the Iranian Copyright Act does not clearly state which stage of the design is subject to protection, so it is hard to specify a copyright holder. Furthermore, it is difficult to rely on protection by the Copyright Act as most carpets are made by individuals or small business owners and awareness of

110) Ibid., p. 73.

111) Ibid.

112) Ibid.

113) Ibid.

114) (9), Article 2, the Iranian Copyright Act

115) Articles 3 and 4, Iranian Copyright Act

116) Hassan Soleimani, A Legal Study of the Intellectual Property System, and Trade Related Aspects of Intellectual Property Rights Agreement: Implantation and Impacts, University of Wales, Aberystwyth, 2006, p. 153.

copyright is very poor.¹¹⁷⁾

It is possible to consider protecting the name of a certain region, city, or area where carpets are produced with a trademark based on the trademark act under the industrial property act. However, the name of a certain region is linked to the design, color, the whole concept, and message of the carpet, which originates from the culture, tradition, and skills of a master. So, protecting only the name of a special region with a trademark has its limit. In addition, if a trademark has potential to mislead the public or trade parties regarding the traits or characteristics related to a geographical source of relevant products or services, the mark may not be registered under the Iranian industrial property law.¹¹⁸⁾ So it is difficult to protect the name of a carpet-producing city or region with a trademark.

The Iranian industrial property law defines collective mark as a “visual indication allowing identification of source or other characteristics including quality of products or services of a legal or natural person who uses the mark under the control of the collective mark right holder.”¹¹⁹⁾ Right holders of collective mark with GI may prohibit unauthorized use of their collective marks on products that do not originate from the geographical origin of the collective marks and use of their marks on the products that do not meet the quality standards of collective marks.¹²⁰⁾ However, GIs as collective marks under the industrial property law are valid for 10 years in accordance with the protection period of trademarks and may be renewed every 10 years, whereas the protection period under the GI protection law is not limited.¹²¹⁾ GIs protected as collective marks have a risk of becoming generic while GIs are not likely to lose their rights as a result of becoming generic terms because the existing name of a region or specific area is used for GIs. To provide additional GI protection along with the industrial property law and copyright act, the Iranian government established a separate law to protect GIs and its implementing ordinances in 2005 and 2006, respectively.

2. Concept of Geographical Indication

According to the Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement, geographical indication (GI) is defined as an “indication that attributes the product’s origination to region, locality, or region of the country in terms of quality, reputation, and other features of the product so it could be attributed to the geographical origination.”¹²²⁾

117) Ibid., p. 154.

118) (c), Article 32, the Iranian Industrial Property Law

119) (b) Article 30, the Iranian Industrial Property Law

120) Supra note 109 at 73.

121) Ibid.

122) (1), Article 22, the TRIPS Agreement

A trademark, a similar but distinct concept from a GI, is a recognizable sign that identifies a product from others. It is similar to GI in that a trademark indicates the identity of products and ensures their quality. However, both are different as a trademark identifies a product or service as originating from a particular company while a GI identifies a product as originating from a particular place. When a trademark is not a well-known sign, such as a fanciful or arbitrary mark, or does not state the features or characteristics of the product, the trademark is subject to a stronger protection because of its distinctiveness. In contrast, a GI uses the predetermined name of the place as a geographical indication.¹²³⁾ A trademark can be assigned to anyone, anywhere in the world, while a GI cannot be assigned to someone outside that place or not belonging to the group.¹²⁴⁾

An indication of source means an indication referring to a country or a place in that country as being the country or place of origin of a product. Examples of indications of source include “Made in Iran” and “Product of Iran.” Unlike GIs, an indication of source does not imply the presence of reputation, quality, or characteristic of the product essentially attributable to its place of origin. Indications of source only require that the product originate in a certain area.¹²⁵⁾

Appellations of origin are a special kind of GIs. GIs and appellations of origin have something in common; both require a qualitative link between the product to which they refer and its place of origin, and inform consumers about a product’s geographical origin and a quality of the product linked to its place of origin. However, the difference between them is that in the case of appellations of origin, the link with the place of origin must be stronger and the quality or characteristics of a product must result exclusively or essentially from its geographical origin.¹²⁶⁾ It is safe to say that the protection scope GIs is wider than that of indications of source and narrower than that of appellations of origin because an appellation of origin does not include “reputation” in its definition. It means that in the case of indications of source, the raw materials should be sourced in the place of origin and that the processing of the product should also take place there, while in the case of GIs, a single criterion from reputation, quality, and other characteristics attributable to geographical origin is sufficient.¹²⁷⁾

GIs in a broader context are interpreted as a generic concept that include the concepts of indications of source and appellations of origin.¹²⁸⁾

123) WIPO, Frequently Asked Questions: Geographical Indications, <http://www.wipo.int/geo_indications/en/faq_geographicalindications.html>.

124) Ibid.

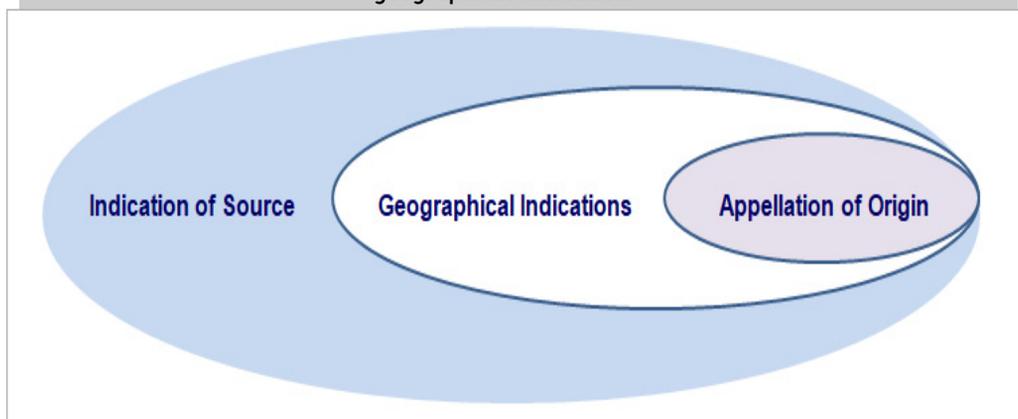
125) Ibid.

126) Ibid.

127) Ibid.

128) Byiybg-II KIM, Analysis of Major Issues of Geographical Indication and Counter Measures, Intellectual Property 21, Vol. 22, 2006, Jan. issue. <<http://www.kipo.go.kr/upload/webzine/webzine0601-01.pdf>>

[Figure 2-21] Relation between indication of source, appellation of origin, and geographical indication¹²⁹⁾



3. International Treaties on Geographical Indication

A. Geographical Indication before TRIPS

Diverse concepts related to GIs are protected by various forms of laws. Because the export of products with GIs is closely linked to economic gains of the country, it is very important to protect GIs effectively in as many countries as possible. However, protecting GIs internationally is not easy because of the different legal concepts depending on countries.

The international protection of GIs was agreed for the first time through the Paris Convention for Protection of Industrial Property signed in 1883. The Paris Convention made it possible to protect GIs as an intellectual property and to ban imports of products with a false indication of source. However, the Convention does not provide a clear definition of a GI and limits false indications to the ones with the intention of deception, so GIs that can mislead the public are not affected. Iran joined the Convention in 1959.¹³⁰⁾

The Madrid Agreement for the Repression of False or Deceptive Indications of Source on Goods, created in 1891, has more extensive provisions on GI protection than the Paris Convention. The Madrid Agreement defines indication of source and includes not only deceptive indications but also misleading GIs in the targets of regulation. The Agreement, however, allows relevant agencies of an importing country to decide which appellations (other than regional appellations concerning the source of products) do not come within the scope of the Agreement. Iran became a member of the Agreement in 2004.¹³¹⁾

129) Ibid.

130) Soo-Seok KIM, Study on Legislation of Geographical Indication, Intellectual Property 21.
<<http://www.kipo.go.kr/home/portal/nHtml/Data/NewKnowJ07.html>>.

The Lisbon Agreement for the Protection of Appellations of Origin and their International Registration was adopted in 1958, revised at Stockholm in 1967, and entered into force on September 25, 1966. Iran joined the Agreement in 2006. The Lisbon Agreement was specifically concluded to facilitate the international protection of a special category of such GIs and aims to protect GIs and others with a minimum of formalities and expense through a single procedure of WIPO.¹³²⁾ A GI under The Lisbon Agreement means an appellation of origin, which is a geographical name or a traditional designation used on products with a specific quality or characteristics that are essentially attributable to the geographical environment.¹³³⁾ The Agreement defines an appellation of origin as “the geographical denomination of a country, region, or locality which serves to designate a product originating therein, the quality or characteristics of which are due exclusively or essentially to the geographical environment, including natural and human factors.”¹³⁴⁾

An internationally registered appellation of origin must be protected in all countries of the Lisbon system. In addition, the Agreement regulates any usurpation or imitation that are unlikely to lead to misunderstanding or confusion.¹³⁵⁾ Unlike the indication of source under the Madrid Agreement that focuses on protecting consumers from misunderstanding a product, the appellation of origin under the Lisbon aims not only to protect consumers but to protect products and secure rights. Therefore, products can be protected from right infringement by those who cannot use appellations of origin even though consumers are not deceived about the characteristics of products or their origin.¹³⁶⁾

For the international registration under the Madrid system, appellations of origin need to be protected according to domestic laws, administrative rules, and court rulings, and the person who secured the right of appellation of origin of the country can apply for an international registration through the government of the country. The International Bureau is required to notify patent offices of member countries of the Lisbon Agreement of the registration of indication of origin. In principle, internationally registered indication of origins are protected in all member countries of the Lisbon Agreement and protected without period limit as long as the indication is protected in the origin country.

131) Ibid.

132) WIPO, The Lisbon System, International Protection for Identifiers of Typical Products from a Defined Geographical Area, <http://www.wipo.int/edocs/pubdocs/en/geographical/942/wipo_pub_942.pdf>

133) Ibid.

134) Lisbon Agreement Article 2.

135) Soo-Seok Kim, op cit.

136) Ibid.

B. Geographical Indication under TRIPS Agreement

(1) Need to Join TRIPS Agreement

Iran has joined the Madrid Agreement and Lisbon Agreement to protect GIs. But the Madrid Agreement has 33 and Lisbon Agreement has only 28-member countries. The two Agreements have specific provisions on GIs, but they have a limit on their international protection of GIs as the scope of protection is restricted to the lands of member countries. The Paris Convention applies to most countries as it has 177-member countries but its provisions on GIs are not sufficient to comprehensively address relevant issues. The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement) provides extensive provisions on GIs covering all industrial products. At present, Iran is not a member of the TRIPS Agreement,¹³⁷⁾ but the entry process is currently under way since the application submission to join the WTO on July 19, 1997.

(2) Two-stage Protection of TRIPS Agreement for Geographical Indication

Articles 22 through 24 of Section 3 of the TRIPS Agreement are provisions on GI protection. GI protection of the TRIPS Agreement consists of two stages: provisions of general GI protection and provisions on additional protection for wines and spirits. Article 22 is about the general protection applied to all products and states legal measures to refuse or invalidate the registration or prohibit use of a trademark that can mislead the public as to the true place of origin. Article 23 is about a stronger protection applied to wines and spirits and stipulates measures to refuse or invalidate the registration of a trademark or prohibit use of a GI related to wines and spirits regardless of whether misleading the public. General protection is applied when consumers may be misled to the geographical origin of goods or any use of a trademark or GI constitutes an act of unfair competition. In contrast, the stronger protection is an absolute protection provided regardless of the misunderstanding caused or the confusion among the public, and use of expressions such as “kind,” “type,” “style,” or “imitation” is prohibited. Article 24 is about exceptions, and it states that if a name has become a generic term or generalized, or has been already registered, it cannot be protected as a GI.

137) WIPO : Iran, <<http://www.wipo.int/wipolex/en/profile.jsp?code=IR>>.

[Table 2-48] GI-related provisions of TRIPS agreement

	Article 22	Article 23
Types	Standard level of protection	Higher level of protection (additional)
Products	No limitation	Wines and spirits
Degree of protection	Prevent the use of any means indicates or suggests that the good originates in a geographical area other than the true place of origin	
	Misleads the public as to the geographical origin of the good or constitutes an act of unfair competition	Absolute prohibition including translation, or accompanied by expressions such as “kind,” “type,” “style,” “imitation,” or the like

Paragraph 4 of Article 23 of the TRIPS Agreement prescribes that “in order to facilitate the protection of geographical indications for wines, negotiations shall be undertaken in the Council for TRIPS concerning the establishment of a multilateral system of notification and registration of geographical indications for wines eligible for protection in those Members participating in the system.” It states that the Council for TRIPS shall undertake negotiations concerning the establishment of a multilateral system of notification and registration of geographical indications for wines. Registration targets were expanded to spirits as a result of the Singapore Ministerial Conference in 1996. As the Doha Declaration prescribes that negotiations shall be undertaken to establish a multilateral system of notification by the 5th Ministerial Conference, these issues have been discussed at the special meeting of the Council, thereby making no progress.¹³⁸⁾

(3) Discussion on the Expansion of Increased Protection Target

Paragraph 1 of Article 24 of the TRIPS Agreement negotiations aimed at increasing the protection of individual geographical indications under Article 23. Each country holds a different position depending on their interests on GIs. Members of the Central European Free Trade Agreement (CEFTA) and countries like Latvia and Estonia requested the WTO to expand the increased protection to other products while the United States and Japan objected to the expansion. There are numerous GIs of wines, and in France alone, there exists about 300 wine GIs. So, it is natural to have a conflict between European countries that want to establish a multilateral system to internationally register GIs, particularly wine GIs, and countries, such as the United States, Canada, Chile, New Zealand, Paraguay, and Japan, which do not have many traditional products to register. The objecting countries argue that the expansion of protection will lead to rediscussion of the TRIPS Agreement and

138) Byoung-Il Kim, op cit.

it is not fair for member countries who will not benefit from the expansion to pay the revision cost of the existing provision.¹³⁹⁾

Korea has shown reservations about the expansion as it does not have many products with GIs to be protected abroad and is likely to face more pressure than gains from the expansion. However, there are opinions on the need for the expansion on the ground that expansion of targets is a global trend, the burden from the expansion will be smaller than that of restrictive multilateral system, and Korea's GI targets are not liquor but general agricultural products like Kimchi and Goryeo ginseng.¹⁴⁰⁾ This explains the reason that not only European countries but also other nations, like India, Egypt, Indonesia, Cuba, Dominican Republic, Honduras, Pakistan, Kenya, Sri Lanka, Mauritius, and Nicaragua, have requested an additional expansion of protection. India has asked for the expansion regarding basmati rice, Darjeeling tea, alphonso mango, and Kolhapuri chappals shoes.

Iran has multiple traditional and special products like Persian carpets, pistachios, and saffron. Therefore, at this moment when Iran is trying to join the TRIPS Agreement, the country should consider the expansion of increased protection, which is currently applied only to wines and spirits. With that, Iran can expect a stronger protection for traditional Iranian products.

139) Suresh C Srivastava, Geographical Indications under TRIPS Agreement and Legal Framework in India: Part 1, *Journal of Intellectual Property Rights*, Vol. 9, January 2004, p. 12.

140) Byoung-Il Kim, *op cit*.

4. Acts on Geographical Indication of Korea and Iran

A. Korean Act to Protect Geographical Indication

The types of GI protection are divided into establishing a special law for appellation of origin or GI, protecting by trademark act, applying both the trademark act and special law, and protecting by unfair competition law, etc.

[Table 2-49] Types of GI protection in major countries¹⁴¹⁾

Methods	Countries	Agency
Collective or certification marks under the Trademark Act	USA, Germany, Canada, Australia, China, Estonia, etc.	Patent Office
Special law for GI protection	France, Spain, Sweden, Denmark, Finland	Ministry of Agriculture and Forestry, etc.
Trademark act and Special law for GI protection	Korea, England, Ireland, Germany, Austria, Belgium, the Netherlands, Luxembourg, Greece, Portugal, Italy	Patent Office, Ministry of Agriculture and Forestry, etc.
Protection through Unfair competition law, etc.	Japan (trademark act for wines and spirits)	Patent Office and Court, etc.

Korea protects GIs with the Trademark Act and special law for GI protection. The local laws of Korea for GI protection include the Trademark Act, Agricultural Productions Quality Control Act, and Unfair Competition and Trade Secret Protection Act. The Trademark Act and Agricultural Productions Quality Control Act stipulate the protection of registered GIs and registration process while the Unfair Competition and Trade Secret Protection Act states a strong protection of unregistered GIs.¹⁴²⁾

(1) Protection by Trademark Act

The Trademark Act defines geographical indication as an “indication used to identify goods produced, manufactured, or processed in a specific area in cases where a certain quality, reputation or other characteristic of goods has essentially originated from such specific area.”¹⁴³⁾ Article 33 of the Act states that a trademark consisting solely of a mark indicating, in a common manner, the place of production, quality, raw materials, effect,

141) Patent and Trademark Office, Guide for Collective Mark with Geographical Indication, 2005, pp. 6.

142) Soyoung Yook, Legislation research on FTA Geographical Indication and domestic implementation, FTA legislation research (II) 14-22-①, Korea Legislation Research institute (2014), pp. 20.

143) Paragraph 4, Article 2, the Trademark Act.

usage, quantity, shape, price, method of production, method of processing, method of use or time of the goods may not obtain trademark registration,¹⁴⁴⁾ meaning that a GI may not be registered as a trademark as it is regarded as a mark indicating the place of production, quality, raw materials, and others.

The Act stipulates that if a trademark is not recognizable to consumers as a trademark indicating the source of goods of a specific person as a result of using the trademark before filing an application for trademark registration, trademark registration may not be granted. It is very difficult for a GI, which can be seen as an indication of origin, to be recognizable to consumers as a trademark indicating a specific person as a result of using the trademark. Therefore, the Trademark Act protects GIs as a collective mark with geographical indication or certification mark with geographical indication.¹⁴⁵⁾

A collective mark with geographical indication means “a mark intended to be used directly by a corporation incorporated by persons who produce, manufacture, or process goods on which a geographical indication may be used or is intended to be used by its members.” A certification mark with geographical indication means “a mark used by a person who commercially certifies a geographical indication to certify that goods of others meet specified geographical characteristics.”¹⁴⁶⁾

An individual or a corporation under the Commercial Act may not file an application for a collective mark with GI because such application can be filed by a corporation jointly incorporated by persons who produce, manufacture, or process goods on which a GI may be used. There is no limitation to the kinds of goods subject to GI protection. GI protection includes agricultural, marine, processed, and industrial goods including handicrafts but excluding the service jobs.¹⁴⁷⁾ Production, manufacture, and process do not need to happen at one place. Depending on the good, the characteristic of a good may occur by one of producing, manufacturing, or processing in the area while other goods may require all of producing, manufacturing, and processing to take place in the same area.¹⁴⁸⁾ Just being produced, manufactured, or processed in the area is not a requirement for a GI as quality, reputation, and other characteristics of goods must be essentially linked to the geographical origin. Characteristics of goods must be attributable to a geographical environment that includes natural conditions, like climate, soil, and topography, as well as human conditions like unique techniques.¹⁴⁹⁾

To register a collective mark with GI, it is necessary to determine or find an organization

144) Paragraph 2, Article 33, the Trademark Act

145) So-young Yook, *op cit.*, p. 43.

146) Paragraph 1, Articles 2, 6, and 8, the Trademark Act.

147) Patent and Trademark Office, *Guide for Collective Mark with Geographical Indication*, 2005, p. 12.

148) *Ibid.*

149) *Ibid.* p. 13.

that will lead the application for registration of a collective mark with GI, to decide qualification, scope, condition, etc., for entry to the organization, and to establish articles of incorporation regarding the use of a collective mark with GI, etc.¹⁵⁰⁾

Not only a corporation but also an individual can be a right holder of a collective mark with GI. A natural or legal person can register a collective mark with GI when the person is capable of commercially certifying and managing quality, place of origin, production method, and other characteristics of a good or service work. However, registration is not allowed when the collective mark is to be used on a good for the person's own business or used for service work.¹⁵¹⁾

(2) Protection by Agricultural Productions Quality Control Act

The Agricultural Productions Quality Control Act states that geographical indication means an "indication displaying that agricultural products or processed agricultural products are produced and processed in a specific region if reputation, quality and other attributes of such products are essentially originated from the geographical characteristics of the specific region."¹⁵²⁾ The Trademark Act include not only agricultural products or processed agricultural products but also industrial products in the scope of products that may use a GI while the Agricultural Productions Quality Control Act restricts the target only to agricultural products or processed agricultural products.¹⁵³⁾ A GI needs to be registered according to the registration process to be protected by the Agricultural Productions Quality Control Act.¹⁵⁴⁾ Only a corporation, consisting of people who produce, manufacture, or process agricultural products or processed agricultural products with geographical characteristics in a specific area, may apply for a registration of a GI. However, if there is only one producer or processor of agricultural products or processed agricultural products with geographical characteristics, a non-corporation may apply for a registration.¹⁵⁵⁾

(3) Conflict between Protections by Trademark Act and Agricultural Productions Quality Control Act

Various discussions took place at the initial stage on having a separate protection provision by introducing a collective mark with GI under the Trademark Act in addition to the protection by the Agricultural Productions Quality Control Act and others. Considered measures include revising the Trademark Act to improve its collective mark system and to

150) Ibid.

151) So-young Yook, op cit., p. 53.

152) Paragraph 1, Article 34, Agricultural Products Quality Control Act.

153) So-young Yook, op cit., p. 58.

154) Article 32, Agricultural Products Quality Control Act.

155) Paragraph 2, Article 32, the Agricultural Products Quality Control Act.

protect a GI as an intellectual property regardless of the GI registration system of the Agricultural Productions Quality Control Act and others, as well as revising the Trademark Act or establishing a separate special law after scrapping the GI registration system of the Agricultural Productions Quality Control Act. It was more desirable to unify protections of GIs in principle. However, both systems were greatly different regarding the purpose, content, method, and effect of protection. Therefore, it was determined to use both protections of the Trademark Act and Agricultural Productions Quality Control Act to secure stronger legal protection measures, such as claim for prohibition or claim for compensation by introducing a complementary system that can be compatible with the existing GI registration system and can fulfill the GI protection under the TRIPS Agreement.¹⁵⁶⁾

It is possible to have conflicts between a trademark and collective mark with GI registered according to the Trademark Act, and a GI registered according to the Agricultural Productions Quality Control Act. With regard to this, the Trademark Act stipulates that any trademark used on goods recognized as identical to the designated goods, which is identical or similar to a registered collective mark with the GI of another person based on first to file, may not be registered.¹⁵⁷⁾ The Agricultural Productions Quality Control Act also states that a GI that is similar to a GI already registered or applied by another person based on the Trademark Act, or that is identical or similar to a well-known trademark or GI of another person, may not be registered.¹⁵⁸⁾

B. Iran's Protection of Geographical Indications Act

(1) Definition of Geographical Indications

Iran enacted the Protection of Geographical Indications Act in 2005 and the enforcement decree of the act in the following year to protect the geographical indications along with the Trademark Act. The reason why Iran enacted the Protection of Geographical Indications Acts is because it wanted to protect Iran's traditional products and handcrafts as well as goods with foreign geographical indications so that it could protect the producers of Iranian traditional goods and their products locally and abroad and encourage production.

Article 1 of the act defines that "a geographical indication means an indication that identifies a good as originating in the territory, region, or locality of the country, provided that the quality, reputation, or other characteristics of the good is essentially attributed to its geographical origin."¹⁵⁹⁾ This is an extended concept of the Lisbon Agreement, which

156) Patent and Trademark Office, Guide for Collective Mark with Geographical Indication, 2005, p. 8.

157) Subparagraph 8, Paragraph 1, Article 34, the Trademark Act

158) Article 32, the Agricultural Productions Quality Control Act.

159) Article 1, the Protection of Geographical Indications Act

requires that “the quality and the characteristics of the product be due exclusively, or essentially to the geographical environment.” This also matches the definition of the TRIPS Agreement on the geographical indication, which Iran is preparing to join.

Article 10 of the Protection of Geographical Indications Act defines that “producers shall be allowed to use a registered geographical indication if the good has the quality, reputation and other characteristics as mentioned in the respective certificate of registration, and place of activities of the producers is the geographical area indicated in their certificate of registration.” The Act on the production of geographical indications defines that a geographical indication shall be used “if the quality, reputation, and other characteristics of the good are due to the source of the geographical environment.” Meanwhile, it also defines that a registered geographical indication shall be used if the good has “the quality, reputation and other characteristics.” As a result, there is a possibility of confusion in understanding whether the Act requires that the good meet all the three conditions or just one.

Article 3 of the Protection of Geographical Indications Act defines that “if a geographical indication has been registered, it shall raise the legal assumption that such an indication is a geographical indication within the meaning as prescribed in the Act, and if a geographical indication fulfills the conditions set forth in Article 1 (A), it shall be protected regardless of whether it has been registered or not.” In this regard, it can be interpreted that the registration of a geographical indications shall not necessarily be prior to creating a right for the geographical indication. Thus, it is expected that there could be a conflict between registered geographical indications and unregistered geographical indications.¹⁶⁰⁾

(2) Application Procedures for the Registration of Geographical Indications

The Act on Protection of Geographical Indications stipulates requirements, procedures, and qualifications of the applicant, etc., in detail for the registration of geographical indications.

Any natural person, legal entity, groups of such persons, or entities who are engaged in the production of the goods originating in a specific geographical area, or any competent authority in production, distribution, or policy making for the goods can file an application for the registration of a geographical indication to the Industrial Property Office at the Organization for Registration of Deeds and Estates.¹⁶¹⁾

The organization for Registration of Deeds and Estates shall examine the application to determine if the application complies with the requirements, and proceed with the

160) (A), Article 3, the Protection of Geographical Indications Act in Iran

161) Article 7, the Iranian Act on Protection of Geographical Indications

publication of the result.¹⁶²⁾ The interested party or competent authority may submit the opposition to the application for the registration of the geographical indication to the organization for Registration of Deeds and Estates.¹⁶³⁾ The Organization for Registration of Deeds and Estates shall notify a copy of the opposition to the applicant. Failure to send the response by the applicant within the prescribed period shall be considered to be withdrawal of the application.¹⁶⁴⁾ If the applicant sends a counter-statement within the prescribed period, the organization for Registration of Deeds and Estates shall furnish a copy of the same to the person filing the opposition and, after hearing the parties, shall make a decision about the registration.¹⁶⁵⁾

(3) Act of Infringement

False and deceptive introduction of or attribution to the geographical indication for the good, or any use of the geographical indication that constitutes an act of unfair competition under Article 10 bis of the Paris Convention are the acts of infringement. And, any interested person or group may institute proceedings in the court to prevent the use of geographical indications or claim damages.¹⁶⁶⁾ Any person who performs any act of infringement of rights for geographical indications shall be subjected to civil and criminal penalties.¹⁶⁷⁾

This matches Article 22 of the TRIPS Agreement, which defines that member countries shall provide legal means to prevent the use of geographical indications in case of (a) the use of any means in the designation or presentation of a good that indicates or suggests that the good in question originates in a geographical area other than the true place of origin in a manner which misleads the public as to the geographical origin of the good, (b) any use which constitutes an act of unfair competition within the meaning of Article 10bis of the Paris Convention.

(4) Relationship between Trademarks and Geographical Indications

The registration of any trademark for the goods that is falsely attributed to a geographical origin or shall mislead the public as to the real origin of the goods shall be refused.¹⁶⁸⁾ Any interested party may request the court to cancel the registration of such trademarks.¹⁶⁹⁾ However, where a trademark has been applied for or registered in good

162) (A), Article 9, the Iranian Act on Protection of Geographical Indications

163) (B), Article 9, the Iranian Act on Protection of Geographical Indications

164) (C), Article 9, the Iranian Act on Protection of Geographical Indications

165) (D), Article 9, the Iranian Act on Protection of Geographical Indications

166) Article 2, the Iranian Act on Protection of Geographical Indications

167) Article 6, the Iranian Act on Protection of Geographical Indications

168) Article 14, the Iranian Act on Protection of Geographical Indications

faith, where rights to a trademark have been acquired through use in good faith, if the said cases have taken place before the date of entry into force of the Act on Protection of Geographical Indications or before the geographical indication is protected in its country of origin, the Act shall not prejudice the registrability of or the validity of the registration of a trademark, on the basis that such trademark is identical with, or similar to, a geographical indication.¹⁷⁰⁾

5. Policy Recommendations

If Iran would join the TRIPS Agreement, which it is now preparing for, it would expect the international protection of traditional goods including carpets. Under the TRIPS Agreement, hard liquor and wine are strongly protected. If this strong protection is applied to Iran's traditional goods, Iran would be able to more effectively protect them in the international community. Prior to this, the Iranian government needs to examine expected effects and loss arising from an extended list of the production by the agreement.

Iran's traditional goods are protected by the Act on the Protection of Industrial Property, the Copyright Law, and the Act on Protection of Geographical Indications. However, the coverage of the protection is not clearly stipulated by the laws, so it should be reviewed first. Specifically, the provisions of the Act on the Protection of Industrial Property concerning the collective mark need to be more detailed, and the coverage of protection for the carpet design in the Copyright Law should be more clarified. Moreover, there is a need to discuss how to address the conflict between the geographical indications of the Act and geographical indications that have already been used.

Concerning the conflict between trademarks and geographical indications, there is still the possibility of conflict between the collective marks of geographical indications under the Protection of Industrial Property Act and registered geographical indications under the Protection of Geographical Indications Act. Addressing problems concerning the conflict between trademarks and geographical indications needs legislation.

When a right to a good is infringed, the affected one sometimes find it difficult to protect the right because of high costs of litigation. In addition, Iran needs to provide education and training for the producers and exporters of the traditional goods in case these rights were infringed abroad.

169) Article 14, the Iranian Act on Protection of Geographical Indications

170) (B), Article 15, the Iranian Act on Protection of Geographical Indications

Chapter 6. Research on the Establishment of Copyright Collective Management Organizations in Iran

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1. Meaning and Need of Copyright Collective Management

Collective management of copyright is referred to as a system in which rights holders give collective management organization the right to exercise their copyrights and related rights so that those organizations can collectively manage the copyrights and related rights. Meanwhile, a supportive system is called “the system of collective management of copyright.”¹⁷¹⁾

CMOs are referred to as organizations that manage copyrights and neighboring copyrights in the interest and on behalf of the owners of the copyrights. CMOs receive the partial or whole copyrights from the rights holders and exercise them in the interest of the rights holders.¹⁷²⁾

As a rights holder has moral and economic rights, he/she has the right to decide how and by whom his/her works can be used, and to receive economic rewards for the use of the work. In principle, it is possible that the rights holder can manage and control the use of his work by himself. However, the methods of reproduction are being diversified and works have begun to be used abroad. As a result, it is almost impossible for the individual rights holder to monitor where and by whom the work is being used and manage the work appropriately. And even if it is possible, it would take the rights holder a lot of money and

171) Hae Wan Lee, The Current System of Collective Administration of Copyright and Its Ideal Path to the Future

172) Tarja Koskinen-Olsson, Nicholas Lowe, Educational Material on Collective Management of Copyright and Related Rights, 2012, WIPO, p. 11.

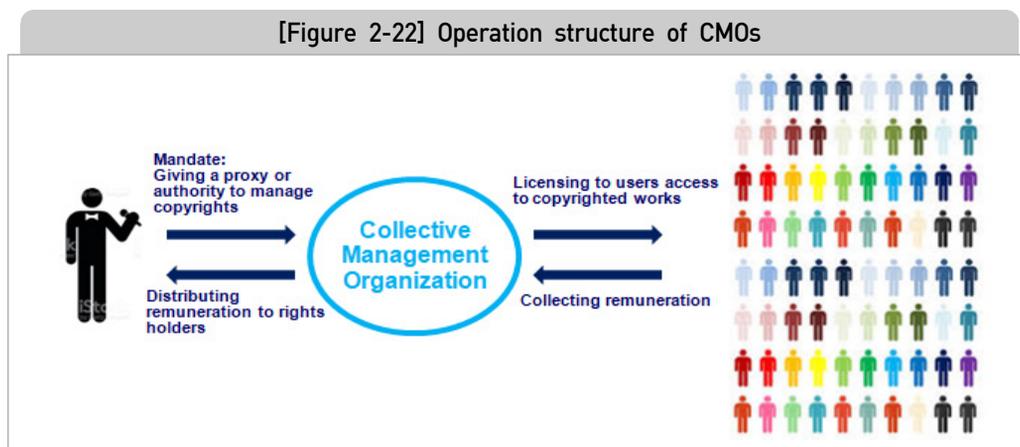
time.¹⁷³⁾ For example, it does not make much practical sense for individual rights holders to negotiate loyalties, permission, and licenses for the use of their works with users, radio, and TV stations whenever their works are used. In fact, it is impossible in reality. Moreover, if users have to find the rights holders of works that they want to use to get the permission for the use of their works, it might cause great inconveniences, hinder the use of works, and encourage illegal use of works. CMOs receive or are entrusted with the right to exercise the copyright by rights holders so that they can make license contracts with users on behalf of the rights holders. As a result, the rights holders can concentrate on their creative activity while being rewarded for their works, facilitating the use of works.

When it comes to international exchanges of works, organizations for management of copyright from each country are able to manage works based on reciprocal representation agreements, making it easier to manage the rights of the rights holders. In addition, users can easily find who manages the copyrights of works from the CMOs, and with the permissions from the CMOs, they can conveniently use works from abroad, contributing to international exchanges of works.

2. Structure of CMOs (Collective Management Organization)

A. Relationship between Rights Holders and CMOs

Rights holders entrust the right to manage their copyrights to CMOS so that they can exercise the copyrights between users and rights holders on behalf of the rights holders and distribute loyalties to the rights holders. As a result, the rights holders can concentrate on their creative activity while being rewarded for their works. Moreover, CMOs can exercise the copyrights that they are given by the rights holders in their interests.¹⁷⁴⁾

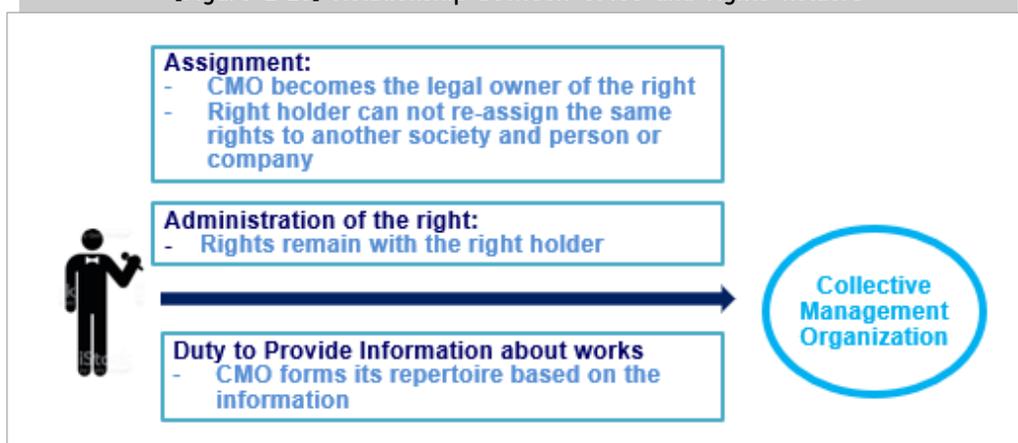


173) Hae Wan Lee, *Ibid.*

174) Hae Wan Lee, *Ibid.*

Rights holders assign the whole or part of their rights to CMOs or give authority to manage their rights for a given time on an exclusive or non-exclusive basis. On the basis of this, CMOs exercise the rights on behalf of the rights holders. The rights holders have a duty to provide information about their works to the CMOs, and, on the basis of this information, the CMOs manage the repository of the works. CMOs locally and abroad can sign a representation agreement so that users can use the works whose rights are owned by foreign CMOs.

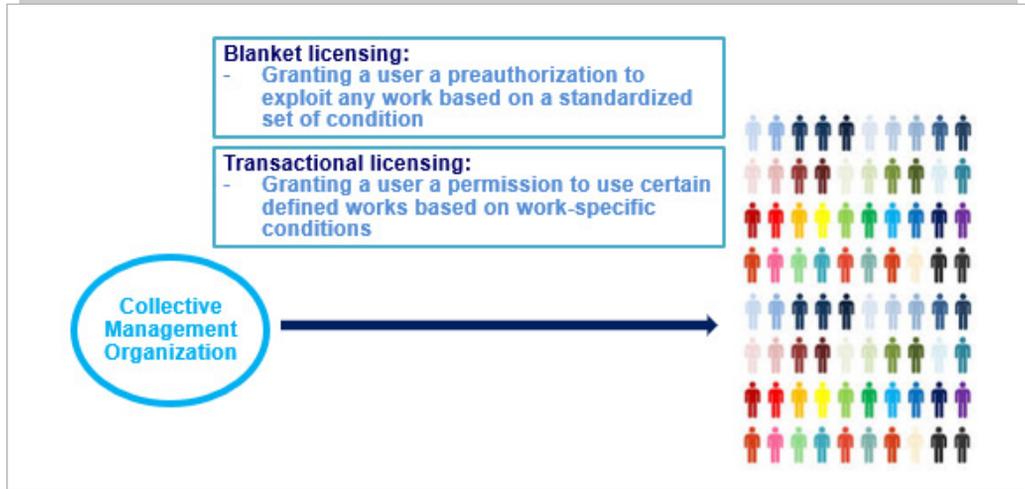
[Figure 2-23] Relationship between CMOs and rights holders



B. Relationship between CMOs and Users

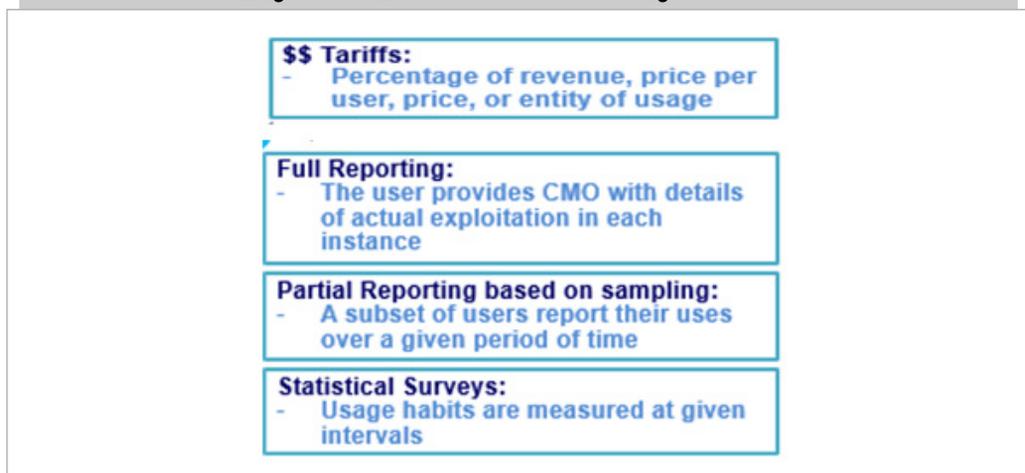
CMOs sign licensing contracts with users who want to use any work in the CMOs' repertoire and collect royalties for the use of the work. There are two methods of licensing: blanket licensing, which grants a user a pre-authorization to exploit any work, and transactional licensing based on a standardized set of conditions, which grants a user permission to use certain defined works based on work-specific conditions.

[Figure 2-24] Relationship between CMOs and users



To collect fees, collective management organizations need to follow when, where, and what works are used. There are a number of ways for CMOs to obtain relevant usage data. First, the user provides the CMO with details of actual exploitation in each instance. Second, users report their exploitation of works over a given time based on samples of usage patterns and instances. Third, CMOs estimate the volume of uses of works based on statistically collected data. In fact, the way of the users reporting their usage whenever they use the work is hardly used. In general, CMOS collect a certain percentage of advertising revenue from radio and TV stations.

[Figure 2-25] How to follow the usage of works

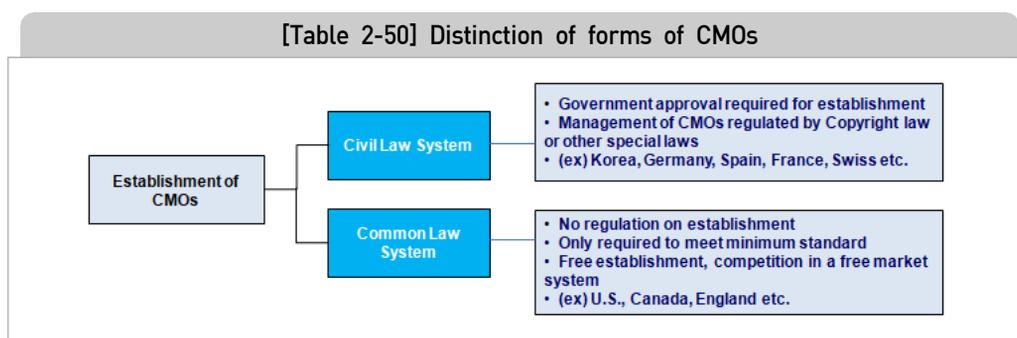


3. Stages to Establish CMOs

A. Forms of CMOs

(1) Common Law Countries and Civil Law Countries

The forms of CMOs are different between Common Law countries and Civil Law countries. In Common Law countries, including the United States, Canada, the UK, etc., the copyright trust management business is classified as a free business type, so there is no regulation on the establishment of CMOs if they meet the minimum standards in the law.¹⁷⁵⁾ They are allowed to operate their business based on market economy principles.¹⁷⁶⁾ In Civil Law countries, including Germany, Spain, France, Switzerland, etc., they need to get approval from the government to establish CMOs.



The copyright trust management business is classified into copyright trust service and copyright agency or brokerage service. Copyright trust service means a business that continuously manages rights on behalf of the holder of economic rights of author, publication right, or neighboring rights.¹⁷⁷⁾ Copyright agency or brokerage service means a business that acts as an agent or a broker on behalf of the holder of economic rights of author, publication right, or neighboring right to the use of performances, phonograms, or broadcasts.¹⁷⁸⁾ South Korea has adopted a licensing system for copyright trust service and a report system for copyright agency or brokerage service.

175) Young-lok Lee, Study on How to Promote Organization for Collective Management of Copyright, Copyright Commission (2007), p. 67

176) Hae Wan Lee, The Current System of Collective Administration of Copyright and Its Ideal Path to the Future

177) Paragraph 18, Article 18, the Copyright Act

178) Paragraph 19, Article 18, the Copyright Act

(2) Single Organization and Multiple Organizations

A single organization system takes an approval system for the establishment of CMOs to regulate the entry of multiple organizations into each field, and to allow a single organization or a minority of CMOs to manage rights.

If a single organization has a monopoly status in supplying content, rights holders might fail to realize their interests and rights to the fullest because even though they are not satisfied with unfair provisions provided by a single organization for collective management of copyright, they have no other option but to accept them.¹⁷⁹⁾ In addition, if the single organization has the exclusive supply right of content, this will give the organization a strong power in negotiation with users, and, as a result, users might fall victim to the abusive exercise of the power by the organization.¹⁸⁰⁾ Meanwhile, if there is only one CMO in each field, it would be much easier to manage all CMOs. Moreover, the single organization would solely manage the works of the field. This will help reduce management costs and, as a result, distribute more to the rights holders. When it comes to a multiple organization system, competition between organizations will reduce fees for the usage of the works and remuneration to the rights holders. However, the single organization can make usage fee agreements in the interest of rights holders with a great bargaining power. It is also possible to thoroughly monitor and manage the organizations nationwide, and users can save their time and money needed to get the permission for the use of the works as they only need to negotiate with one organization. Furthermore, it will become easier to build an international network.¹⁸¹⁾

A multiple organization system allows the establishment and operation of multiple CMOs to manage a single right. This system adopts the report system for the establishment of multiple organizations, and it gives more and diverse choices to rights holders. In addition, competition enables more reasonable and efficient management, reducing management costs. Moreover, multiple CMOs will compete with each other to attract users. As a result, the system will bring a lot of benefits to rights holders including improved service for the interest of rights holders, stronger incentives, and provision of information about the usage of their works, etc.¹⁸²⁾

For users, usage fees will be determined more effectively and efficiently based on the interplay of supply and demand. Rights holders with competitive works will receive more usage fees, but those with uncompetitive works will receive lower fees, enabling reasonable pricing.¹⁸³⁾

179) Hae Wan Lee, *Ibid.*

180) *Ibid.*

181) Young-lok Lee, Study on How to Promote Organization for Collective Management of Copyright, Copyright Commission (2007), pp. 89 to 90

182) *Ibid.*, p. 91

There are a number of disadvantages of collective management by multiple organizations. If right sets fees for a new use pattern with an organization, other organizations will never set the fees higher than the first one, which could reduce usage fees. In addition, it could increase management costs because it would double the investment in creating the database for distribution. In France and the UK, the rights of performances and recording are managed separately, but they are managed by a single organization to reduce management costs.¹⁸⁴⁾

As each CMO will negotiate for permission to use works with TV stations, content providers, record companies that use works on a large scale, negotiation costs would increase and these costs would be passed on to the consumers, increasing costs for consumers as well.¹⁸⁵⁾

The progress of digitalization has enabled easy reproduction of works whose quality is the same as the original ones, and reproduced works can be transferred worldwide through a computer network. Thanks to digitalization and the network, it becomes increasingly easier to use works online. Moreover, with the development of electronic data processing technology, copy prevention technology, and the watermark, the utilization of devices to follow the usage of works has enabled users to easily use the works, pointing out that there might be no need for a single organization to exclusively manage copyright.¹⁸⁶⁾

183) 著作権の集中管理制度のあり方 第4節 具体的な法的基盤整備の内容, 文部科学省,

184) Ibid.

185) Ibid.

186) Ibid.

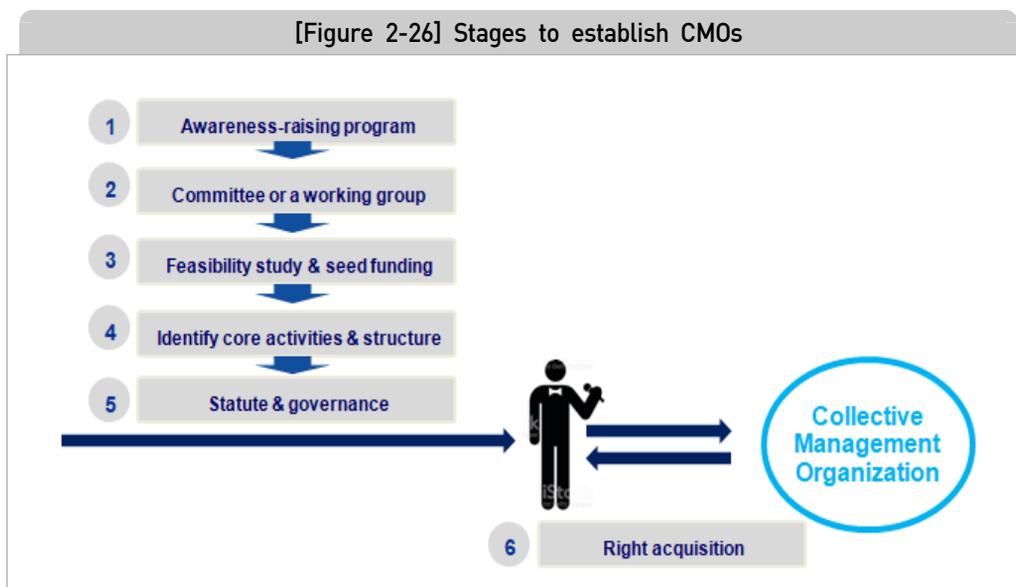
B. Preparatory Stages to Establish CMOs

The first step to establish CMOs is to educate rights holders. It is necessary to teach rights holders about their rights, the need for the establishment and operation of CMOs, their future interests, and the importance of rights holders to actively participate in the establishment of CMOs.

The second step is to establish a committee or a working group for CMOs centered on rights holders. In the establishment of CMOs, the role and support of government agencies including the Ministry of Culture, Sports and Tourism.

The third step is to do a feasibility study of the establishment of CMOs on the group of rights holders and users. It is important to ask the group of rights holders whether they want to join CMOs to estimate the approximate number of potential members, and what rights they want to entrust. What is also important is to grasp the number of potential users and the composition of users.

The fourth step is to specify the form and core activities of CMOs. The fifth step is to lay the legal foundation by modifying relevant regulations on the establishment and operation of CMOs. The sixth step is to be entrusted or authorized to exercise copyrights on behalf of rights holders.



C. Modification of Acts and Subordinate Statutes

For the establishment of a CMO, it is very important to set applicable provisions concerning the establishment and operation of the CMO in the Copyright Act or Special Act. Specifically, there should be regulations on the types, characters of business depending on the type of the establishment, requirements for permission and report, application procedures, fee approval system, supervision for copyright trust service providers, etc.

South Korea, according to the legislation of civil cases, has classified copyright trust service into copyright trust service and copyright agency or brokerage service, adopted a permission system for copyright trust service and a report system for copyright agency or brokerage service, and has provisions on the establishment and operation of the CMO in the Copyright Act instead of the Special Act.

Article 2 of Korea's Copyright Act defines copyright trust service and copyright agency or brokerage service. It is also prescribed in the Copyright Act that any person who intends to engage in a copyright trust service shall obtain permission from the Minister of Culture, Sports and Tourism; and any person who intends to operate the copyright who intends to engage in a copyright agency or brokerage service shall report thereon to the Minister of Culture, Sports and Tourism.¹⁸⁷⁾ It is also stipulated that the CMO shall be comprised of the holders of right to works, etc., and not aim at profit-making as requirements for the establishment of the CMO.¹⁸⁸⁾ Therefore, if a person is not a rights holder, the person is not allowed to operate a copyright trust service to make profits. In addition, there are detailed regulations concerning application procedures for permission for copyright trust service and copyright agency or brokerage service in the enforcement decree of the Copyright Act.¹⁸⁹⁾ The Minister of Culture, Sports and Tourism has the authority to order the suspension of business, cancel permission for, or order close copyright trust service.¹⁹⁰⁾ The Copyright Act includes regulations about ground rules to collect fees, fee approval system, obligation of copyright trust service provider, and supervision authorities over copyright trust service providers.¹⁹¹⁾

187) Paragraph 1, Article 105, the Korean Copyright Act

188) Paragraph 2, Article 105, the Korean Copyright Act

189) Articles 47 and 48, the Enforcement Decree of the Korean Copyright Act

190) Article 109, the Korean Copyright Act

191) Paragraph 4, Article 10 and Paragraph 4, Article 105, the Korean Copyright Act. Paragraph 1, Article 49, the Enforcement Decree of the Korean Copyright Act. Articles 105, 106, 108 and 110, the Korean Copyright Act

[Table 2-51] Provisions about the CMO in the Copyright Act

		Copyright Trust Service	Copyright Agency or Brokerage Service
Provisions about copyright trust service	Paragraphs 26, 27 of Article 2	The term "copyright trust service" means a business which continuously manages rights on behalf of the holder of economic rights of author, an exclusive publication right, publication right, or neighboring right, or a person who has the right as a database producer, and which includes the case of a general agent regarding exploitation of works	The term "copyright agency or brokerage service" means a business which acts as an agent or a broker on behalf of the holder of economic rights of author, an exclusive right of publication, publication right, or neighboring right or a person who has the right as a database producer, regarding exploitation of works
Permission and report for copyright trust service	Paragraph 1 of Article 105	Any person who intends to engage in a copyright trust service shall obtain permission from the Minister of Culture, Sports and Tourism as prescribed by Presidential Decree	A person who intends to engage in a copyright agency or brokerage service shall report thereon to the Minister of Culture, Sports and Tourism as prescribed by Presidential Decree
Requirements for nonprofit organizations	Paragraph 2 of Article 105	<p>Anyone who intends to operate the copyright trust service pursuant to the provisions of paragraph (1) shall satisfy the following requirements, prepare regulations defining the duties of copyright trust service as prescribed by Presidential Decree, and submit them together with an application for permission for copyright trust service to the Minister of Culture, Sports and Tourism: Provided, that the requirements prescribed in subparagraph 1 shall not apply to a public institution referred to in the proviso to paragraph (1).</p> <ol style="list-style-type: none"> 1. That it shall be an organization comprised of the holders of right to works, etc.; 2. That it shall not aim at profit-making; 3. That it shall have sufficient capability to execute the duties, such as the collection, distribution, etc., of fees. 	-
When permission or report is prohibited	Paragraph 3 of Article 105	<p>Any person falling under any of the following subparagraphs shall not be eligible to obtain a license to engage in a copyright trust service or copyright agency or brokerage service (hereinafter referred to as "copyright trust service") under paragraph (1) or report it: <Amended by Act No. 14634, Mar. 21, 2017></p> <ol style="list-style-type: none"> 1. Any incompetent person under the adult guardianship or quasi-incompetent person under the limited guardianship; 2. Any person who has been declared bankrupt and has not yet been reinstated; 3. Any person who is within a one-year period following the execution of criminal penalties of a fine or more severe punishment, or the final decision to suspend the execution of a sentence for violation of this Act, or who is in the probation period following a suspended sentence; 4. Any person who has no domicile in the Republic of Korea; 5. Any legal person or organization in which a person falling under any of subparagraphs 1 through 4 is the representative or executive officer. 	

[Table 2-51] Continued

		Copyright Trust Service	Copyright Agency or Brokerage Service
Procedures for application for permission, etc.	Articles 47 and 48 of the Enforcement Decree of the Copyright Act	<p>(Application, etc. for Permission for Copyright Trust Service)</p> <p>(1) A person who intends to obtain permission for copyright trust service pursuant to the provisions of Article 105 (1) and (2) of the Act shall submit an application (including an application in electronic document) for permission for copyright trust service stipulated by Ordinance of the Ministry of Culture, Sports and Tourism attached with the regulations (including an electronic document) on the duties of copyright trust service that involve the following matters to the Minister of Culture, Sports and Tourism: <Amended by Presidential Decree No. 20676, Feb. 29, 2008></p> <ol style="list-style-type: none"> 1. Terms and conditions of copyright trust agreement; 2. Terms and conditions of work exploitation agreement. <p>(2) When the Minister of Culture, Sports and Tourism grants a permit to engage in a copyright trust service, he/she shall issue a certificate of permit for copyright trust service stipulated by Ordinance of the Ministry of Culture, Sports and Tourism. <Amended by Presidential Decree No. 20676, Feb. 29, 2008></p> <p>(3) When the person who has obtained the permission pursuant to paragraph (2) intends to alter the regulations on the duties of copyright trust service pursuant to paragraph (1), he/she shall obtain the permission for alteration.</p>	<p>(Report of Copyright Agency and Brokerage Service)</p> <p>(1) A person who intends to report copyright agency and brokerage service pursuant to Article 105 (1) of the Act shall submit a report (including a report in electronic document) of copyright agency and brokerage service stipulated by Ordinance of the Ministry of Culture, Sports and Tourism attached with the regulations (including an electronic document) on the duties of copyright agency and brokerage service that involve the following matters to the Minister of Culture, Sports and Tourism: <Amended by Presidential Decree No. 20676, Feb. 29, 2008; Presidential Decree No. 21634, Jul. 22, 2009></p> <ol style="list-style-type: none"> 1. Contractual terms and conditions of copyright agency and brokerage; 2. Contractual terms and conditions of work exploitation. <p>(2) The Minister of Culture, Sports and Tourism upon receipt of a report pursuant to paragraph (1) shall issue a certificate of report of copyright agency and brokerage service stipulated by Ordinance of the Ministry of Culture, Sports and Tourism. <Amended by Presidential Decree No. 20676, Feb. 29, 2008></p> <p>(3) If a person who has reported pursuant to paragraph (1) intends to alter the reported matters, he/she shall submit a report of alteration of copyright agency and brokerage service as stipulated by the Ordinance of the Ministry of Culture, Sports and Tourism. <Amended by Presidential Decree No. 20676, Feb. 29, 2008></p>
Cancellation of permission and punishment	Article 109	<p>(Cancellation, etc. of Permission)</p> <p>(1) The Minister of Culture, Sports and Tourism may order the suspension of business for a specified period of no longer than six months, if a copyright trust service provider commits any of the following subparagraphs: <Amended by Act No. 8852, Feb. 29, 2008; Act No. 14083, Mar. 22, 2016></p> <ol style="list-style-type: none"> 1. Where he/she has received an amount in excess of the fee approved pursuant to the provisions of Article 105 (5); 2. Where he/she has received an additional usage fee in addition to the usage fee approved pursuant to the provisions of Article 105 (5); 3. Where he/she has failed to make a report under Article 108 (1) without any justifiable reason or made a false report; 4. Where he/she has received an order under Article 108 (2), and failed to fulfill the order without any justifiable reason; 5. Where he/she has received a request to make integrated collection under Article 106 (3) and failed to comply with the request without any justifiable reason. <p>(2) The Minister of Culture, Sports and Tourism may cancel permission for, or order to close copyright trust service if a copyright trust service provider commits any of the following subparagraphs: <Amended by Act No. 8852, Feb. 29, 2008></p> <ol style="list-style-type: none"> 1. That the copyright trust service provider has obtained permission or made a report by fraudulent or unlawful means; 2. That the copyright trust service provider continues to engage in the business after receiving an order of suspension under paragraph (1). 	

[Table 2-51] Continued

		Copyright Trust Service	Copyright Agency or Brokerage Service
Fee collection	Subparagraph 4 of Article 105	Any person who has obtained permission or reported for copyright trust service under paragraph (1) (hereinafter referred to as "copyright trust service provider") may collect fees for his/her services from the holder of author's economic rights or other interested persons.	
Fee approval system	Paragraph 4 of Article 5 Paragraph 1 of Article 49 of the enforcement decree of the Copyright Act	<p>The rates and amount of fees under paragraph (4) and the rate and amount of usage fee that a copyright trust service provider receives from users shall be determined by the copyright trust service provider after he/she obtains approval from the Minister of Culture, Sports and Tourism. In such cases, the Minister of Culture, Sports and Tourism shall collect opinions of interested persons, as prescribed by Presidential Decree.</p> <p>Where a copyright trust service provider intends to apply for the approval (including application for alteration; hereinafter the same shall apply) of rate or amount of fee or royalties pursuant to the former part of Article 105 (5) of the Act, he/she shall apply for approval to the Minister of Culture, Sports and Tourism in writing.</p>	
Obligation of copyright trust service providers	Article 106	<p>(1) The copyright trust service provider shall prepare a list of works, etc. that he/she manages on a quarter year basis in written or electronic form as prescribed by Presidential Decree so that all the people may peruse the list during business hours at the least.</p> <p>(2) Where a user requests in writing, the copyright trust service provider shall supply the information under his/her management necessary for concluding exploitation contract of works, etc., which is prescribed by Presidential Decree, within a considerable period of time in writing, unless there are justifiable causes to the contrary.</p> <p>(3) Where necessary for users' convenience, the Minister of Culture, Sports and Tourism may request a copyright trust service provider that receives usage fees under Article 105 (5) or an organization that collects remunerations from persons who do public performance using commercial phonogram under Articles 76-2 and 83-2 to make an integrated collection, as prescribed by Presidential Decree. In such cases, the copyright trust service provider or remuneration collection organization in receipt of such request shall comply therewith unless there is any good cause. <Newly Inserted by Act No. 14083, Mar. 22, 2016></p> <p>(4) A copyright trust service provider or remuneration collection organization may entrust the affairs related to the integrated collection of usage fees and remunerations as prescribed in paragraph (3) to a person prescribed by Presidential Decree. <Newly Inserted by Act No. 14083, Mar. 22, 2016></p>	

[Table 2-51] Continued

		Copyright Trust Service	Copyright Agency or Brokerage Service
		<p>(5) A copyright trust service provider or remuneration collection organization that entrusts affairs related to collection under paragraph (4), shall pay entrustment commission, as prescribed by Presidential Decree. <Newly Inserted by Act No. 14083, Mar. 22, 2016></p> <p>(6) Necessary matters concerning the time frame for, and methods, etc. of, settlement of usage fees and remunerations collected under paragraph (3) shall be prescribed by Presidential Decree. <Newly Inserted by Act No. 14083, Mar. 22, 2016></p>	
Supervision of copyright trust service providers	Article 108 and 110	<p>(Supervision)</p> <p>(1) The Minister of Culture, Sports and Tourism may demand a copyright trust service provider to submit a necessary report on the duties of the copyright trust service. <Amended by Act No. 8852, Feb. 29, 2008></p> <p>(2) In order to promote the protection of rights and interests of authors and the convenient use of works, the Minister of Culture, Sports and Tourism may issue necessary orders concerning copyright trust service. <Amended by Act No. 8852, Feb. 29, 2008></p> <p>(Hearings)</p> <p>If the Minister of Culture, Sports and Tourism intends to cancel the permission for, or order to close copyright trust service pursuant to the provisions of Article 109 (2), he/she shall hold a hearing. <Amended by Act No. 8852, Feb. 29, 2008></p>	

4. Policy Recommendations

As the government plays an important role in establishing a CMO, Iranian government agencies like the Ministry of Culture and Islamic Guidance or Islamic Republic of Iran Broadcasting need to provide active support and intervene in a series of the establishment procedures of CMOs.

When a rough sketch of the form and roles of the CMO is made, Iran should have applicable provisions about the establishment and operation of the CMO in its Copyright Act or related laws. Iran also needs to enact provisions about function, structure, operation of the CMO, agencies with authority of supervision, and sanctions in the Copyright Act or Special Act so that the CMO can be established and operated based on those provisions. For example, it should establish provisions on whether a CMO should be a profit-making organization or a nonprofit organization, whether to approve royalties, and about the structure, operation, and administrative costs of the CMO as well as sanctions, etc.

As rights holders transfer or entrust their rights in whole or in part to the CMO so that it can exercise them, we can assume that provisions about the transfer or entrustment of rights by rights holders in the Copyright Act can become legal foundations for the operation of the CMO. Article 5 of Iran's Copyright Act defines that the copyright can be transferred in whole or in part, but it has no provision about the permission for the use of works. Article 45 of Korea's Copyright Act stipulates that "the holder of author's economic right may grant another person authorization to use the work. The person who obtained such authorization pursuant to paragraph (1) shall be entitled to exploit the work in such a manner and within the limit of such conditions so authorized." This shows that South Korea already has provisions about the permission for the use of works, and it is assumed that those provisions serve as the foundations for the establishment of the CMO. It is recommended that, prior to the establishment of the CMO, Iran should discuss methods and procedures for the establishment and complete the establishment of applicable regulations in Iran's Copyright Act.

Chapter 7. Status Check for Iran's WTO Accession and Policy Recommendation (Sharing the Main Contents of the TRIPS, Iran's Intellectual Property System, and Korea's Experiences)

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 - B. Features of the TRIPS Agreement
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 - B. Clarification of Regulations for Enforcement of Intellectual Property
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 - D. Utilization of Exceptions of the TRIPS Agreement in joining the Berne Convention
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1. Background of Policy Recommendations

The economic sanctions on Iran, which were first imposed in 1979 when the United States froze Iranian assets in their country, were finally lifted (January 16, 2016) after the IAEA officially confirmed that Iran had completed the necessary steps in the agreements in 2016. After the sanctions were lifted, Iran has exerted great efforts to boost the growth of the economy with various measures including its overseas assets, resumption of the export of resources such as crude oil and natural gas, expanded foreign direct investment, etc.

Since the international economic sanctions on Iran were lifted, countries can now freely trade and invest in Iran and the trade volume has been on the rise. In addition, there are high expectations for Iran's joining of the WTO. However, because of objections from the United States, Iran has yet to obtain WTO membership.

In the international trade field, Iran has continuously attempted to join the WTO. To become a new WTO member, Iran submitted its application on July 1996. From 1996 to 2001, the United States blackballed Iran's joining of the WTO, accusing the country of supporting international terrorism. On May 2001, Iran's application for WTO membership as a developing country was brought up to the WTO General Council. Since then, the WTO General Council held meetings 22 times, but failed to reach an agreement.

On March 2005, the United States temporarily withdrew the objection from Iran's joining of the WTO as a condition for the nuclear negotiation. On May 26, 2005, Iran's application for WTO membership was approved by the WTO General Council, and Iran became a WTO observer country. Iran believed that, after the economic sanctions were lifted in 2016, it could become a full member of the WTO with the cooperation of the international community including the United States. However, Iran has yet to become a full member mainly because of strong objections from the United States.

Although Iran has difficulties mainly because of objections from the United States, etc., joining the WTO is critical in advancing into the global stage. This suggests that Iran needs to make multilateral preparations and efforts to join the WTO. In this regard, it is quite meaningful for Iran to advance the infrastructure and system of intellectual property. In trade and commerce between countries, intellectual property is gaining more and more significance. Now, bilateral and multilateral free trade agreements are established based on the TRIPS Agreement (Agreement on Trade-Related Aspects of Intellectual Property Rights), which is the Annex to the agreement establishing the WTO, and TRIPS-plus in the global market. Therefore, the important challenges facing Iran is to build the infrastructure of intellectual property similar to the TRIPS Agreement and advance its intellectual property system.

In particular, Iran has wanted to seek advice on how to improve the infrastructure of intellectual property and advance the intellectual property system through Korea's Knowledge Sharing Program (KSP). Therefore, we need to look at where Iran stands in seeking to join the WTO since 1996 and examine the level of Iran's infrastructure and system of intellectual property so that we can suggest future directions concerning how to improve and advance Iran's infrastructure and system. In the pursuit of this purpose, we want to set the TRIPS-Plus as the future direction of Iran's infrastructure of intellectual property to grasp the main content of the TRIPS Agreement to see the current state of intellectual property in Iran. In addition, we want to take a look at the implications from Korea's strategy and experience becoming a WTO member country.

2. Iran’s Efforts to Join the WTO

A. WTO Organizations and Member Countries

The WTO comprises the Ministerial Conference, General Counsel and Councils for each area under the General Council. The Ministerial Conference consists of the representatives of the member countries and is the topmost decision-making body that can take decisions on all matters under any of the multilateral trade agreements. The Ministerial Conference is being held at least every two years. The General Council is the highest-level decision-making body during the time when the Ministerial Conference is not held. The General Council plays a role as the Dispute Settlement Body and the Trade Policy Review Body. It plays a central role in the operation of the WTO and is frequently being held, usually 5 to 6 times every year. Councils for each area under the General Council include Council for Trade in Goods, Council for Trade in Services, and Council for Trade-Related Aspects of Intellectual Property Rights. The Council for Trade-Related Aspects of Intellectual Property Rights is responsible for the general supervision of the TRIPS Agreement.

[Table 2-52] Classification of WTO member states

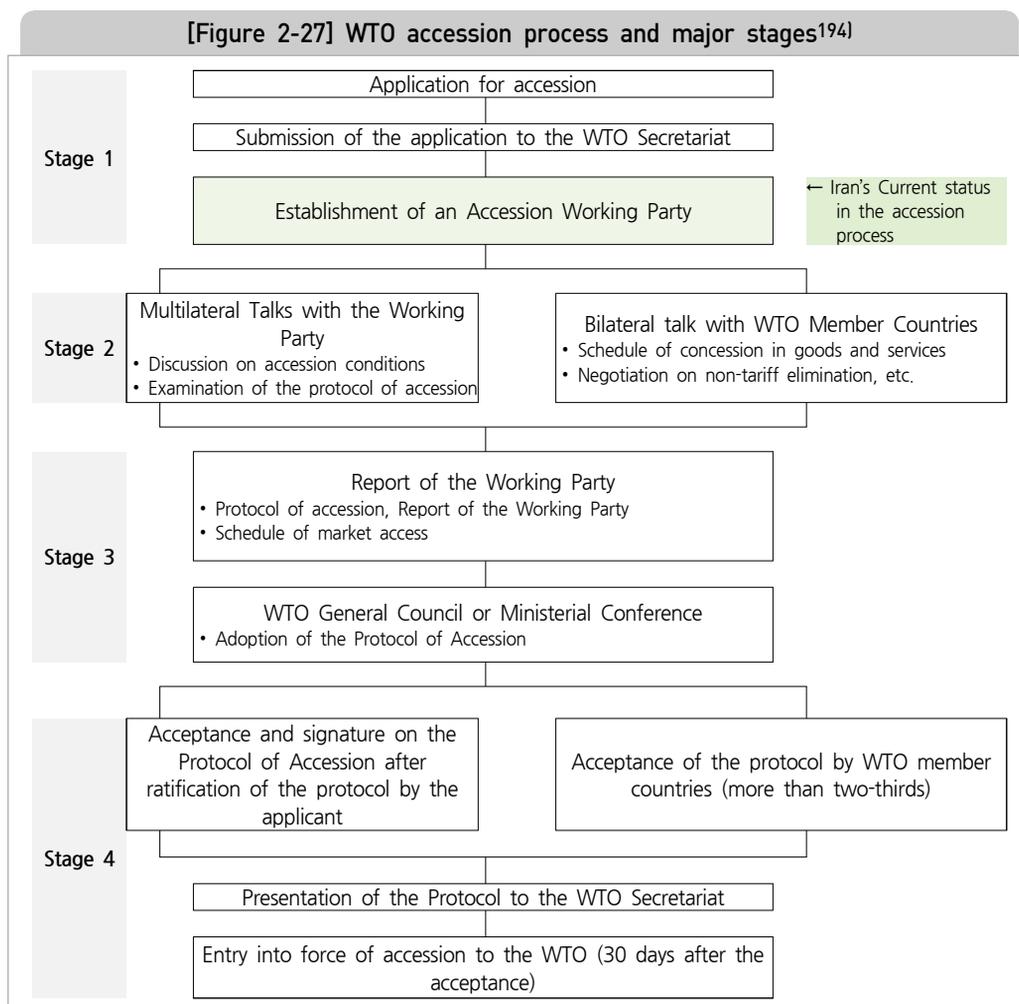
Classification	Number of Membership	Outline
Original member states 1	75	<ul style="list-style-type: none"> Article 11 of the Agreement establishing the WTO 75 countries including the parties to GATT before January 1, 1995 who accepted the Agreement establishing the WTO before the said date
Original member states 2	52	<ul style="list-style-type: none"> Article 15 of the Agreement establishing the WTO The parties to GATT before January 1, 1995 who accepted the Agreement establishing the WTO from January 1, 1995 to January 1, 1997 No need for an accession working party or concession negotiation
New member states	36	<ul style="list-style-type: none"> Article 15 of the Agreement establishing the WTO The parties to GATT before January 1, 1995 who joined the WTO through the establishment of an accession working party and concession negotiation
Observers	21 ¹⁹²⁾	<ul style="list-style-type: none"> Observers whose accession to the WTO is in progress

All the member countries of the WTO have the right to ensure the stability and enjoy the benefits of the most-favored-nation treatment between the member countries, thanks to the same trade rules applied to the member countries. In return, the member countries

192) WTO website (February 21, 2018): Algeria, Andorra, Azerbaijan, Bahamas, Belarus, Bhutan, Bosnia and Herzegovina, Comoros, Equatorial Guinea, Ethiopia, Iran, Iraq, Lebanese Republic, Libya, São Tomé and Príncipe, Serbia, Somalia, Sudan, Syrian Arab Republic, Timor Leste, Uzbekistan, South Sudan, Holy See

have the duty to comply with the WTO rules (to open their local market to others). If they fail to comply with this rule, they shall follow disciplinary proceedings accordingly. Any state or independent customs area having full autonomy in the conduct of its trade policies may become a member of the WTO.¹⁹³⁾

As of February 2018, the total number of the WTO membership was 164. There are ways of acceding to the WTO as original members and “members pursuant to Article XII” (new member states). The “original members” are the parties to GATT as of the date of entry into force of the WTO who accepted the WTO Agreement until January 1, 1995, the date of entry into force of the WTO Agreement (pursuant to Article XI), and those who accepted the WTO Agreement until 1 January 1, 1997 (pursuant to Article XIV).



193) The Korean Intellectual Property Office, Procedures to Join the WTO (2008)

[Table 2-53] WTO accession process by stage

Classification		Preparatory Proceedings
Stage 1	Description of all aspects of the trade and economic policies of the applicant	<ul style="list-style-type: none"> • The applicant submits an application and the report on the trade and economic policies to the WTO Secretariat • The Director General circularizes all the member countries • The General Council chairman establishes an accession working party • WTO working parties are open to all WTO Members
Stage 2	Bilateral and multilateral negotiations	<ul style="list-style-type: none"> • The accession working party examines the trade policies and accession conditions of the applicant * Submission of a memorandum describing the trade and economic policies of the applicant (including the schedule of concession and copy of relevant laws) → Question by members in the working party → Answer by the applicant and submission of amendment • Bilateral talks between the applicant and individual member countries * Request by interested parties → Offer by the applicant → counteroffer by interested parties * Focus on policies in goods and services including tariff rates, market access * The results of bilateral negotiations are equally applied to other member countries
Stage 3	Protocol of accession	<ul style="list-style-type: none"> • The applicant writes the schedule of concessions and commitments including market access schedule based on the results of bilateral and multilateral negotiations • The secretariat circularizes, modifies, and reflects • The working party draws up the working party report and the protocol of accession * The working party report is a kind of general report of current situation introducing the applicant's trade policies, institutions, tariff/non-tariff barriers, etc., which is drawn up through multilateral negotiations.
Stage 4	Decision on accession	<ul style="list-style-type: none"> • The accession working party represents the working party report and the protocol of accession to the General Council or the Ministerial Conference • Acceptance requires more than two-thirds majority in favor • The applicant signs the protocol of accession, (when necessary) after the ratification by the parliament • Entry into force 30 days after the acceptance

When the request for membership is accepted, the applicant submits the application to the WTO Secretariat, and the Chairman of the General Council establishes a working party. Then, the working party discusses the accession conditions and examines the protocol of accession. At the same time, the applicant enters into multilateral negotiations with major member states of the WTO.¹⁹⁵⁾

194) The Korean Intellectual Property Office, WTO Accession Process (2008)

195) Major member countries are referred to as interested member countries who participate in the working party and have great interest in trade with Iran.

When the schedules of concessions and commitments are presented to the Council, the Ministerial Conference take a vote. If they are to be approved, two-thirds majority of the WTO members need an in favor vote.¹⁹⁶⁾ After the answer to the MFTR in 2011, the first working party meeting should have been called, but it has not been done so. To call the first working party meeting, the president of council must come to an agreement with member countries on designating a chair of the working group.

B. Iran's status of WTO accession

As Iran is not an “original member country,” it has gone through accession proceedings to be a new member of the WTO since July 1996. The working party on Iran's accession to the WTO was established in May 2005 and its Memorandum on the Foreign Trade Regime (MFTR) was circulated in November 2009. Iran circulated responses to WTO members' questions on the MFTR in 2011.

On average, the WTO accession process takes 17 years and 5 months for observers, but Iran has gone through the process for 21 years, which is much longer than the average time that the process takes for new members. The reason why the approval for Iran's acceding to the WTO has not been made for a long time is mainly because of the political influence of the United States.

[Table 2-54] Time passed since the application of observers

#	Acceding Government (Observer Status)	Date of Application	Total Time Since Application
1	Algeria	06/1987	30 years
2	Belarus	09/1993	24 years
3	Sudan	10/1994	23 years
4	Uzbekistan	12/1994	23 years
5	Iran	07/1996	21 years
6	Azerbaijan	06/1997	20 years

196) Article XII. Accession

1. Any State or separate customs territory possessing full autonomy in the conduct of its external commercial relations and of the other matters provided for in this Agreement and the Multilateral Trade Agreements may accede to this Agreement, on terms to be agreed between it and the WTO. Such accession shall apply to this Agreement and the Multilateral Trade Agreements annexed thereto.
2. Decisions on accession shall be taken by the Ministerial Conference. The Ministerial Conference shall approve the agreement on the terms of accession by a two-thirds majority of the Members of the WTO.
3. Accession to a Plurilateral Trade Agreement shall be governed by the provisions of that Agreement.

[Table 2-54] Continued

#	Acceding Government (Observer Status)	Date of Application	Total Time Since Application
7	Andorra	07/1997	20 years
8	Lebanese Republic	01/1999	18 years
9	Bosnia and Herzegovina	05/1999	18 years
10	Bhutan	09/1999	18 years
11	Bahamas	05/2001	16 years
12	Syrian Arab Republic	10/2001	16 years
13	Ethiopia	01/2003	14 years
14	Libya	06/2004	13 years
15	Iraq	09/2004	13 years
16	Serbia	12/2004	13 years
17	São Tomé and Príncipe	01/2005	12 years
18	Equatorial Guinea	02/2007	10 years
19	Comoros	02/2007	10 years
			Average: 17.5 years

Source: WTO accessions 2016 annual report

As mentioned earlier, Iran believed that, after the economic sanctions were lifted in 2016, it could become a full member of the WTO with the cooperation of the international community including the United States. However, Iran has yet to become a full member mainly because of strong objection from the United States. President Donald Trump declared that he decided to extend the Iranian Nuclear Deal with strings attached on his statement on January 12, 2018 according to the Iran Nuclear Agreement Review Act (INARA).¹⁹⁷ Of course, the EU, Russia, and China decided that Iran had faithfully complied with the JCPOA despite the third decertification by the Trump Administration in October 2017. In addition, the IAEA published a report that Iran had complied with the deal as opposed to what the Trump Administration claimed.

However, this study does not deal with strategic countermeasures to these political issues and uncertainties.

Although Iran has difficulties mainly because of US objections, etc., joining the WTO is

¹⁹⁷ The Iran Nuclear Agreement Review Act (INARA) was spearheaded by the Republican Party and the Act prescribes that the president of the United States of America must report whether Iran complies with the JCPOA or not every 90 days to Congress. Congress has the right to impose new sanctions in 60 days if the president does not report the certification of the JCPOA to the Congress, but it is not mandatory.

critical in advancing into the global stage. This suggests that Iran needs to make multilateral preparations and efforts to join the WTO. In this regard, it makes more practical sense to develop strategic countermeasures. This is because, apart from the US political pressures, intellectual property is gaining more and more significance in trade and commerce between countries, and the establishment of FTAs and multilateral agreements that are more advanced than the TRIPS Agreement, which the WTO was set as a benchmark, has already been under way. Thus, instead of developing strategic countermeasures concerning the WTO that arise from uncertain political scenarios, it is more meaningful to set the TRIPS Agreement and the TIRPs-plus as the future directions for Iran and develop relevant strategic countermeasures to improve the infrastructure of intellectual property and advance the intellectual property system.

3. Examination of the TRIPS Agreement and Iran's Intellectual Property Law

A. Overview of the TRIPS Agreement

Before the TRIPS Agreement, the discussion on the international protection of intellectual property had been led by the WIPO (World Intellectual Property Organization). Various conventions, including the Paris Convention, for the production of industrial property; the Berne Convention, for the protection of literary and artistic works; the Rome Convention, for the protection of performers, producers of phonograms, and broadcasting organizations; and the treaty on intellectual property in respect of integrated circuits (IPIC Treaty), etc., under the supervision of the WIPO provided the international protection for intellectual property. Despite the existence of various conventions for the protection of intellectual property under the supervision of the WIPO, the WTO adopted a new treaty on the protection of intellectual property through the Uruguay Round negotiation (Deok-Young Park, 2003¹⁹⁸).

The GATT, the WTO's predecessor, regulated international trade in tangible goods, but did not regulate intellectual property since intellectual property was not regarded as a trade object. However, the WTO expanded the scope of application to include intellectual property, that is traded or exchanged as a material object, which resulted in the TRIPS Agreement (Yook, So Yong, 2012¹⁹⁹).

The principle of minimum standards for the protection of intellectual property became the basic foundation of the TRIPS Agreement. Member countries can provide a more extensive protection of intellectual property than is required in the TRIPS Agreement, provided that such protection does not contravene the provisions of the TRIPS Agreement. However, it is optional, not mandatory. The principle of the minimum standards for the protection of intellectual property has become an important principle in the multilateral or bilateral negotiations after the entry into force of the TRIPS Agreement. Meanwhile, the TRIPS-Plus includes duties that are more comprehensive and stronger than what the TRIPS Agreement regulates. The TRIPS-Plus includes enforcement measures in criminal sanctions, compensation for damages, prohibition order, responsibilities for arbitration, etc., which are stronger than those in the TRIPS Agreement (Sung Jae Ho, Yim Dae Seong, 2012²⁰⁰).

198) Deok-Young Park, "Protection of Copyrights in the WTO TRIPS Agreement and Recent Developments," the Korean Journal International Law, Vol. 48, No. 2 [2003]

199) So Yong Yook, "ACTA, Is This Really Needed for International Trade?: Focusing on Comparing ACTA with TRIPS," Law Journal Vol. 39

200) Jae Ho Sung, Dae Seong Yim, "An Analysis on the TRIPS Consistency of EU Border Measures," Korean Journal of International Economic Law, Vol. 10, No. 1 [2012]

B. Features of the TRIPS Agreement

One of the features of the TRIPS Agreement is that it adopts a so-called “international convention plus method.” This means that the TRIPS Agreement contains references to the provisions of certain pre-existing intellectual property conventions and adopts provisions of stronger protection. It stipulates that it complies with the Berne Convention for copyright; the Rome Convention for neighboring copyright; the Paris Convention for patent, trademark, geographical indication, design, and closed information (related to unfair competition); and the treaty on intellectual property in respect of integrated circuits. Specifically, they have been drawn from Articles 2 and 3 of the Paris Convention, Article 3 or 5 of the Berne Convention, Article 2, 4, or 6 of the Rome Convention, and the treaty on intellectual property in respect of integrated circuits.

The member countries of the WTO shall comply with Article 1 through 12 and 19 of the Paris Convention, and they cannot avoid duties under the Paris Convention, Berne Convention, Rome Convention, and treaty on intellectual property in respect of integrated circuits by using the TRIPS Agreement.

The second feature is that it adopts the principle of minimum standards for the protection of intellectual property. Article 1 of the TRIPS Agreement stipulates that all member countries have obligations to protect intellectual property at least to the extent it is required in the TRIPS Agreement. In addition, it allows all member countries to determine the appropriate method of implementing the provisions of the TRIPS Agreement within their own legal system and practice. This means that members are obliged to comply with the provisions of the TRIPS Agreement, but, at the same time, there is no limitations on more extensive protection than is required in the agreement when it is necessary. This opens up a possibility of members providing more extensive protection than is required in the agreement when it is necessary. The TRIPS Agreement also stipulates that “members are allowed to provide more extensive protection of intellectual property if they so wish,” reflecting concerns of developing countries that developed countries might ask them to strengthen the protection of intellectual property in multilateral or bilateral negotiations.

Unlike trade in goods²⁰¹⁾ or services²⁰²⁾, which seeks to promote international trade by expanding market access between member countries through the sharing of mutually beneficial trade benefits, the TRIPS Agreement set the minimum standards of protection, and requires all member countries to comply with them without exception. Accordingly, there is concerns that, for developing countries who have relatively weaker infrastructure of intellectual property, the implementation of the minimum standards might serve as a burden and hamper the development of their economies.²⁰³⁾

201) 1947, GATT (General Agreement on Tariffs and Trade)

202) GATS (General Agreement on Trade in Services)

In relation to the minimum standards of protection, there was controversy over whether to exempt certain countries from the obligations of the TRIPS Agreement. The United States and Japan argued that having exemption provisions would defeat the purpose of the TRIPS Agreement and the minimum standards of protection. After discussion, it was decided to exempt some from duties by a three-fourths majority.

The third feature is that the TRIPS Agreement covers industrial property right and copyright at the same time. The TRIPS Agreement covers them in a unified way unlike the Paris Convention and Berne Convention, etc., under the WIPO, which have treated rights with separate conventions.

The fourth feature is that the TRIPS Agreement regulates the protection standards of intellectual property from international trade perspectives. The TRIPS agreement comprehensively covers industrial property right and copyright, but the scope is limited to the field of intellectual property that could serve as a barrier in international trade.

The fifth feature is that the TRIPS Agreement has detailed enforcement provisions of intellectual property protection. The Paris Convention had some provisions that require each ally to adopt economic measures and measures of effective legal remedy, but actual implementation depends on whether they have relevant enforcement provisions within their own legal system.²⁰⁴ The TRIPS Agreement is the first international convention of intellectual property to provide the minimum standards in relation to legal procedures that member countries need to comply with. However, it also allows member countries to follow their own legal system by stipulating that it “considers the difference in legal systems between countries.”

The last feature is that the TRIPS Agreement adopts the Most Favored Nation (MFN) treatment. The MFN treatment means that, in relation to the protection of intellectual *other countries” by a member country shall be given unconditionally and immediately to “all nationals of the member countries.” This means that if a member country grants preferential treatments to a certain country, it has to grant all other member countries preferential treatments as well, unconditionally and immediately. Preferential treatments are concepts that include all favors occurring bilateral or multilateral agreements between member countries. This treatment specifies that all favors that are given to “other countries,” not “other member countries,” are subject to the MFN treatment, making it clear that even though a member country grant a favor to a non-member country of the WTO, it must give the favor to all member countries of the WTO. The MFN treatment has not been adopted

203) Korea Institute for International Economy Policy (KIEP), A study on systemic issues of WTO governance and Korea's policy options, Trade and Investment Study Series / 12-02 (2012)

204) Articles 9, 10, 10 (3) of the Paris Agreement. The Berne Convention also has statements on the execution, but just like the Paris Agreement, the actual executions are depending on whether each ally nation's domestic laws (Article 5 (2), Article 6 (2) (3), Article 10 (2) (1), Article 13 (3), and Article 16).

in other international conventions of intellectual copyright since 1800. Specifically, Article 3 of the TRIPS Agreement prescribes that exceptions may not be allowed in the MFN treatment for the protection of intellectual property.

C. Examination of Iran’s Intellectual Property Laws

Iran’s intellectual property laws include the Patent, Industrial Design and Trademarks Registration Act as an industrial property law, the Act for Protection for Geographical Indications, and the Act for Protection of Authors, Composers and Artists Rights as a copyright law.²⁰⁵⁾

[Table 2-55] Iran’s state of intellectual property Legislation

Name of Legislation	Number of Provisions	Date of Enactment
Patents, Industrial Designs and Trademarks Registration Act	66	2008
Act for Protection of Geographical Indications	16	2005
Electronic Commerce Law	81	2003
Act of Plant Varieties Registration, Control and Certification of Seeds and Seedlings	14	2003
Act on the Protection of Rights of Computer Software	17	2000
Translation and Reproduction of Books, Periodical and Phonograms Act	12	1973
Act for Protection of Authors, Composers and Artists Rights	33	1970

In Iran, the Ministry of Culture and Islamic Guidance, and Islamic Republic of Iran Broadcasting are in charge of copyright, and Iran has not joined any international conventions of copyright. According to Iran’s copyright law, the rights holder obtains the copyright for his work at the same time as his creative work is completed based on his knowledge, creativity, and techniques²⁰⁶⁾, and the Ministry of Culture and Islamic Guidance is operating the registration system for works.²⁰⁷⁾

As a step to join the WTO, amendments of the industrial intellectual property law and copyright law have been introduced in the Iranian Parliament. The approval by the parliament is expected to complement and strengthen the laws of intellectual property.

205) <http://www.wipo.int/wipolex/en/profile.jsp?code=IR>

206) Article 1 of Iran’s copyright law

207) 1st Korea-Iran Intellectual Property Seminar hosted by Embassy of the Republic of Korea in Iran, September 2017

In relation to international conventions of intellectual property, Iran has joined the Paris Convention, Lisbon Agreement, Madrid Agreement, the Patent Cooperation Treaty (PCT).

To strengthen the protection of rights holders, the Iranian government is now considering joining the Berne Convention for the protection of literary and artistic works, and the Rome Convention for the Protection of performers, producers of phonograms, and broadcasting organizations. To that end, the amendment of a more systematic copyright law has been proposed in the Iranian Parliament.

[Table 2-56] International conventions referred to in TRIPS and Iran’s laws

International Conventions Referred to in TRIPS	Membership Status	Related Iranian Laws
The Paris Convention on the Industrial Property (Article 1 through 12, and 19)	Acceded	Industrial Property Law
The Berne Convention about copyright (Article 1 through 21, except author’s moral right)	Accession Considered	Act on Protection of Literary and Artistic works (1970)
The Rome Convention for the Protection of performers, producers of phonograms, and broadcasting organizations	Accession Considered	Industrial Property Law

4. Policy Recommendations

With the core content of the TRIPS Agreement annexed to the WTO, the future directions of improving and advancing the infrastructure of IP and Korea’s experience of joining the WTO suggest implications as follows.

A. Improving the System to Strengthen the Protection of Copyright

In Iran, only 12 types of works prescribed in Article 2 of the Iranian Copyright Law are subject to the protection of copyright. There are also no regulations of copyright protection in information and communication, and, as a result, the works on the Internet are vulnerable to infringement of copyright. They are subjected to the right of reproduction only.²⁰⁸⁾ Four copyrights, including the right to distribute, right of broadcasting, right of a public performance, and right of publication, are defined, but there are no regulations on copyright protection in information and communication, which is why the right of reproduction is regulating the use of works. However, the reality is that regulations

208) The Korean Intellectual Property Office, the Korea Intellectual Property Protection Agency (2017), International Intellectual Property Guide Book -Iran- (February 2017)

restricting reproduction are limited only to the reproduction of the digital format, thus there are no laws to regulate uploading or transmitting files on the Internet. In addition, computer programs and compilations of data are not included in the 12 types of works prescribe in Article 2.

On October 1, 1987, Korea entered into force the World Copyright Convention. As a result, “copyright protection period extension” was required, and in December 1986, the domestic copyright law was completely revised. In addition, the protection of computer program works, etc., was protected by separate computer program protection law.²⁰⁹⁾

In Korea, WTO/TRIPS came into effect on January 1, 1995. Therefore, the content of the WTO/TRIPS agreement shall be reflected in the copyright law of Korea. In addition, to join the Berne Convention, Korea has partially revised its copyright protection level to the international level (Law No. 5015 of December 6, 1995, effective July 1, 1996)

Korea deposited the enactment of the Berne Convention on May 21, 1996 and entered into force on August 13 and August 21. As an obligation of a member of the international treaty, Korea’s domestic law revision procedure has been implemented relatively quickly. At that time, the biggest issue was how to implement the system. In revising the Iranian law, it is necessary to consider a lot about how to systematically implement the amendment.

The Berne Convention, which Iran is considering joining, does not deal with the right of lending. Therefore, Iran needs to build a foundation of institution to protect the right of lending while preparing for the provisions of the TRIPS Agreement.

The TRIPS Agreement stipulates that the term of protection shall be no less than 50 years while the term of protection varies from work to work based on the type. Meanwhile, according to the Iranian Copyright Law, the term of protection for the copyright of photographs and cinematographic works is 30 years, and the initial date is the date of publication (Article 12), which is a relatively shorter term of protection compared with the TRIPS Agreement.

The term of 30 years after the death of the author (Article 12, 30 years from the date of production) in the Iranian law needs to be changed into 50 years from the date of production according to the Berne Convention and the TRIPS Agreement, or 50 years from the date of publication if the life of a natural person is not the basis of the calculation. In addition, as stated above, there are no regulations to protect the public transmission right on the Internet except the right to distribute, right of broadcasting, right of a public performance, and right of publication, thus there is no other option but to regulate the infringement of copyright on the Internet with the right of reproduction. Considering that

209) Enactment of Computer Program Protection Act (Law No. 3920 of December 31, 1986, enacted on July 1, 1987)

there are no rules to regulate uploading or transferring reproduced works on the Internet, Iran needs to consider revising relevant laws.²¹⁰⁾

Comparing the Berne Convention and the TRIPS Agreement shows the difference in the terms of protection depending on the subject. Therefore, legislating laws to satisfy the two conventions can be considered. The following can be the example.²¹¹⁾

- i. The term of protection shall be 50 years from the end of the calendar year of authorized publication (or more than 50 years according to its law).
- ii. If there is no publication within 50 years from the end of the calendar year, the term shall be 50 years from the end of the calendar year when the public get authorized to access the work.
- iii. If there is no authorized publication and the public has no authorized access to the work within 50 years since publication of the work, the term of protection shall be 50 years from the end of the calendar year of publication.

B. Clarification of Regulations for Enforcement of Intellectual Property

The provisions for the enforcement of IP in the TRIPS Agreement is comprised of 5 sections and 21 articles. The pre-existing international conventions of IP have no mandatory provisions concerning the enforcement of IP. However, the TRIPS Agreement provides the minimum standards of the enforcement of IP.

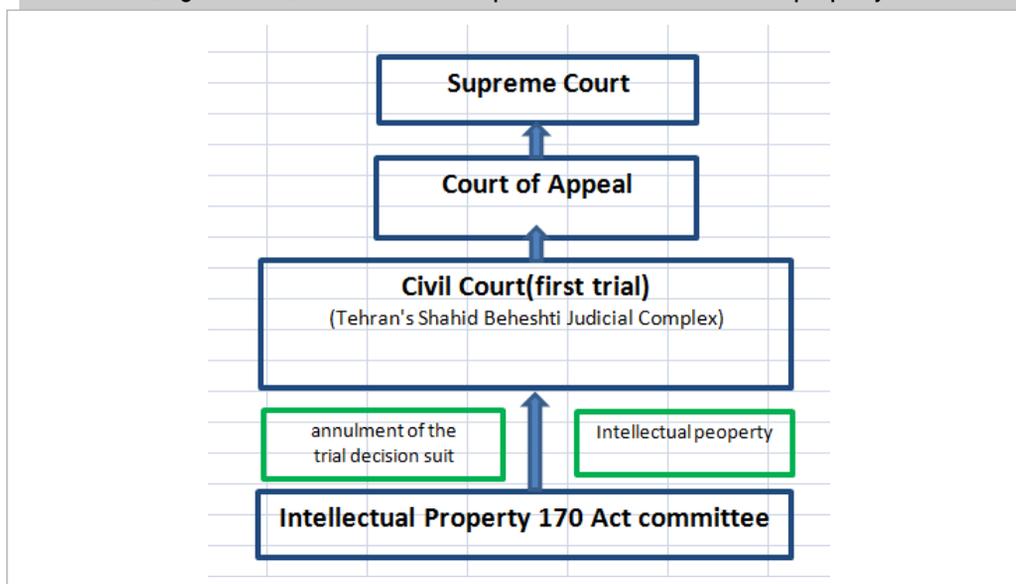
Iran has one competent court for civil and criminal disputes of IP, which is the 3rd branch of court located in Shahid Beheshti judicial complex in Teheran. Request for injunction against infringement, compensation for damage, seizure of infringing copies, etc., can be claimed in a civil way. If there is a dispute about the registration of industrial property, a meeting at the commission of the Industrial Property General Office will be held, and the date of holding session, hour, and place will be announced to the registration applicant or the disputed parties or their legal representative at least 10 days before the session. The protestor against the decision of the commission can file a lawsuit in the IP court within 60 days. The applicant can appeal the decision of the IP court to the appellate court.

Criminal remedies for the infringement of patent right, trademark right, and design right include fines and detention. The jurisdiction of the first trial of a criminal case goes to the Teheran court like civil cases. Like civil cases, the trial of a criminal case is comprised of three instances, and the Supreme Court makes the final decision.

210) Article 4, the Iranian Copyright Law

211) WIPO, Implications of the TRIPS Agreement on Treaties Administered by WIPO (1996), translated by Copyright Commission for Deliberation and Conciliation (December 1996)

[Figure 2-28] Iran's remedial procedures of intellectual property



Source: The Korean Intellectual Property Office, the Korea Intellectual Property Protection Agency (2017), International Intellectual Property Guide Book -Iran-

Iran provides the right to claim injunction against infringement and the right to claim prevention against infringement as proactive measures against potential pirates when there are concerns that the patent right, trademark right, or design right might be violated. These regulations are in line with provisional measures. We need to look at whether the procedures for the above claims meet the standards required by the WTO through the analysis of cases and statistics, and to find and address the shortcomings.

In the enforcement of IP, problems in the procedures of patent application do not contravene the TRIPS Agreement. However, when a foreigner applies for a patent in Iran, there are somewhat unclear regulations for the procedures of patent application, etc., and the Industrial Property General Office is given a lot of discretion. Therefore, Iran needs to improve the system with much clearer regulations of the procedures.

C. Complement Provisions Related to the Protection of Design Including Textile Design

Section 3 of the part 2 of the TRIPS Agreement provide provisions for the protection of design right. Like Article 5 of the Paris Convention, which has simple provisions for the protection of design right, the TRIPS Agreement has only two provisions for design right and no detailed standards for the protection of design right.

The Hague Agreement Concerning the International Deposit of Industrial Designs was

adopted as a special agreement to protect designs in the Paris Convention. This Hague Agreement was adopted to strengthen international protection of designs, and simplify and unify international application procedures as industrial designs are gaining more significance with the development of industrial technologies. Iran is not a member of this Hague Agreement.²¹²⁾

What we need to carefully examine in relation to the protection of design right is the protection of “textile designs.” Article 25 of the TRIPS Agreement provides regulations for the protection of “independently created” industrial designs that are “new” or “original,” and provision for the protection of “textile designs,” which do not exist in the Paris Convention. Iran provides regulations for the protection of handicrafts in Article 20 of the Patents, Industrial Designs and Trademarks Registration Act. We need to compare Article 20 of the Act with the provisions of protection for textile designs in the TRIPS Agreement to figure out whether Iran’s Act satisfies the protection provisions of textile designs in the TRIPS Agreement. Moreover, we need to examine relevant provisions as an effort to strengthen the protection of the Iranian carpet industry.

D. Utilization of Exceptions of the TRIPS Agreement in joining the Berne Convention

The member countries shall comply with Articles 1 through 21 of the Berne Convention and the Appendix thereto pursuant to Article 9 of the TRIPS Agreement.²¹³⁾ If Iran considers joining the Berne Convention, it needs to consider economic factors, including royalties, for the use of foreign works. However, it also needs to examine how to embrace Articles 1 through 21 of the Berne Convention with its own legal system to join the WTO.

Member Countries of the WTO, who are not the contracting parties to the Berne Convention, do not have any rights or obligations in relation to the author’s moral right and any rights arising from it. Iran is not a contracting party to the Berne Convention, but it provides regulations on the authors’ moral right.²¹⁴⁾

The TRIPS Agreement allows limitations or exceptions if they do not unfairly infringe on the due rights of the rights holder. In the Berne Convention, it is extremely difficult to be exempt from retroactive application, but The TRIPS Agreement allows exceptions with strings attached. Thus, it could mitigate the negative effects especially in the Iranian publication industry with exceptions in negotiations for Iran to join the TRIPS Agreement.

212) Korea is a member country of Geneva Act of the Hague Agreement Concerning the International Registration of Industrial Designs (1999)

213) Explaining the TRIPS Agreement, the Copyright Deliberation Board, 1996, pp. 22 to 38 edited.

214) International Intellectual Property Guide Book -Iran-, the Korean Intellectual Property Office, the Korea Intellectual Property Protection Agency (2017), pp. 81 to 82

E. Ex-post Measures for the Protection Against Infringement of Intellectual Property

To strengthen Iran's infrastructure of IP, it needs to come up with not only proactive measures but also ex-post measures to protect IP rights. If Iran joins the TRIPS Agreement, it needs to make more legislative efforts to comply with international standards and strengthen the protection of IP rights.

Korea improved and strengthened its IP system through the Uruguay Round in the early 1990s. This experience can provide implications for Iran to establish a step-by-step plan to improve the infrastructure of IP that could reach the level of TRIPS.

In the 1980s, as Korea's exports rapidly increased, Korea was under increasingly greater pressures from developed countries centered around the United States to open its market. In the 1980s, Korea already improved its regulations and system concerning IP to respond to trade pressures by the United States Trade Representative through Special 301, and experienced damages caused by the infringement of IP in overseas markets. As a result, Korea had a positive attitude toward the TRIPS agreement.

In the TRIPS negotiation, Korea presented a written opinion that the principles of the consideration of pre-existing international conventions, balance between the protection and use of IP, the purpose of public policies inherent to individual countries, and reasonable term of implementation, etc., should be observed. With the launch of the WTO, Korea revised relevant IP laws to accept the mandatory provisions of the TRIPS Agreement including the term of IP protection, protections, procedures. Since Korea greatly revised its system in 1986, the focus of IP-related issues moved from the establishment to the enforcement of the system.

When Iran would prepare for multilateral negotiations of the accession working party in the stage 2 of WTO accession, the main issue of the negotiations with major exporting and importing countries, including the United States, would be the enforcement rather than the establishment of the system. Iran needs to modify its system so that it can well explain the its religious characteristics, narrow the scope of discretion in the enforcement of the system, and enable predictable and consistent enforcement.

F. Establishment of Policy Coordination System²¹⁵⁾

One of the problems facing developing countries in enforcing trade policies or proceeding with trade negotiations is related to the policy coordination system for diversified trade agendas. As it is necessary to coordinate trade policies in various fields including customs, agriculture, services, P, etc., it needs to coordinate policies across all departments. Moreover, it needs to mediate conflicts between various interested parties including economic organizations whose survival and interests are at stake, industries, and nongovernment organizations representing civil society.

Looking at Korea's experience of the Uruguay Round negotiations shows that the response system centered on the then Ministry of the Economic Planning Board to the negotiations played a critical role in operating the efficient and effective policy coordination system.

Unlike government agencies that were generally supposed to represent the interests of the industries within their jurisdiction, the Ministry of the Economic Planning Board did not need to present the interests of certain industries, enabling itself to establish a medium and long-term economic strategy in a neutral and objective manner. This laid the foundation to earn the legitimacy and trust of policies in the process of coordinating the interests of various departments.

One of the examples that something went wrong in Korea's Uruguay Round negotiations is the promotion of policies without consistency because of political conflict. The Korean government came up with solutions to address urgent conflicts and political turmoil arising from conflicting interests rather than with policies based on the principles and long-term point of view. This has served as a great burden in dealing with political issues in Korea.

Learning from Korea's experience could be helpful for Iran to better establish a decision-making system for policies in proceeding with trade negotiations in the future. We need to think about what decision-making system for policies could lead to decisions that are beneficial to the Iranian economy as a whole.

215) Refer to "2010 Modularization of Korea's Development Experience: Trade Liberalization," 11-1051000-000133-01(2011)

G. Establishment and Improvement of Trade Remedy System

As Korea's exports rapidly grew, and the liberalization of import and export was expanded, there was an increasing need to establish a trade remedy system. In 1987, Korea established the Korean Trade Commission, which was responsible for the trade remedy system to monitor and regulate unfair trade practices related to the infringement of IP, etc. Since its establishment, the commission expanded its regulatory authority in the field of IP.

If Iran becomes a member of the WTO, it will have to accept the obligation to open its market without exception. Many of the import-restriction policies of developing countries have already been abolished or in the process of being abolished. More markets around the world are opening their door to others. To establish a response system for this development, it is necessary to establish and develop a trade remedy system. This is because if increased imports hurt Iran's local industries, or an existing import-restriction policy does not work, the only system that can protect the local industries is the trade remedy system.

By priority, it needs to improve its inadequate trade remedy system based on the WTO agreements to work properly. In addition, after the system is well established, it needs to expand the manpower needed to come up with measures to protect the local industries from increasing imports and align relevant organizations as soon as possible.

H. Response to Special 301 Report

As Iran is not a significant trading partner yet for the United States, it is excluded in the watch list for the protection of IP. However, Iran could not ignore the United States' influence in expanding trade and developing its economy.

If Iran is included in the "priority watch list" or "watch list" of the special 301 report, it will face a lot of difficulties in trade and commerce. Therefore, it needs to study the standards to strengthen the protection of IP that the United States has required developing countries to accept in the WTO negotiations. Korea also has an experience of strengthening the system of IP because of pressures of the United States' special 301. This could be a good example for Iran.

In particular, the United States Trade Representative establishes action plans to strengthen the protection of IP for countries that have been included in the priority watch list for two years in a row. If those countries fail to implement the action plans enough, the United States will take necessary measures accordingly. These necessary measures, or countervailing measures, are not clear enough. Thus, it needs to examine previous cases to prepare to respond properly.

The countries (11 countries²¹⁶) included in the priority watch list of the 2016 special

301 report are the ones that have been in the list for two years in a row. Therefore, it needs to take a close look at how these countries implement their action plans, and what countervailing measures the United States would take.

For example, Korea comprehensively revised its IP system in 1986 pursuant to the special 301 reports of the United States. What is noteworthy is that the system provided preferential measures to the American rights holders. For example, although Korea and the United States did not join the Berne Convention, Korea gave the United States the benefit of 10 years of retroactive application.

216) China, Russia, India, Chile, the Argentina Republic, Ukraine, Venezuela, Algeria, Indonesia, Kuwait, and Thailand

2017/18 Knowledge Sharing Program
(Industry & Trade) with Iran

Part III

Designing Training Programs for the IP Training Center



Designing Training Programs for the IP Training Center

We have taken the level of Iran's awareness of IP to design the curriculum and developed detailed education modules tailored to each curriculum so that the IP Training Center can run as an educational institution of IP for civil servants and the general public. In the IP Training Center, you can choose a curriculum depending on who you teach and use the lectures and educational materials for the class to provide an education to help people to increase their awareness of IP. The curriculums of IP education are based on the standard curriculums of IP for the Korean University (graduate school) and divided into introductory course and advanced course by subjects and target groups. We have developed education programs for IP, Patent Analysis, Application for Inventions, and courses for science graduates including IP, Business Start-up and IP (1), Business Start-up and IP (2), Culture, Art and IP, Business Management and IP in the fields of Chemical/Medicine/Software, etc., in the introductory course. We also have developed programs of Patent-Oriented R&D Strategy for the advanced course. (Attachment File will be provided separately.)

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(Industry & Trade) with Iran

Part IV

Seminars for Strengthening the Abilities of the IP Personnel of Iran

Seminars for Strengthening the Abilities of the IP Personnel of Iran

To strengthen the IP capabilities of public servants in Iran, the research team held an education seminar on IP in Teheran from November 11 to 13, 2017 based on the subjects that public servants have chosen in the survey. The group of instructors included Yongsun Kim, the director of the KIPO; Sikyung Sung, the deputy director; Kwangyoung Kim, the team manager; Dr. Yusun Park, a lawyer; Minki Kim, expert advisor; and Dr. Jaeheon Lee from KISTA. About 150 people from the Ministry of Justice, Ministry of Science Research and Technology, the Ministry of Industry and Mine, and Islamic Republic of Iran Customs Administration including public servants in the IP-related fields, IP experts (lawyers, etc) discussed IP related issues in Korea and Iran also joined. Local seminar programs are comprised of Common Curriculum of IP, Creation of IP, IP Protection, and Use of IP. Detailed education programs (draft) consist of Common Curriculum of IP, Understanding of the IP System, Current State of Global IP Policies, Research on Current State of IP Technologies, and Patent Strategy of New Technologies. (Attachment File will be provided separately.)

[Table 4-1] Korea and Iran knowledge sharing seminar education programs

Classification	Detailed Education Programs
IP Common Course (Basic Course)	Understanding of IP system
	Global Intellectual Property Policy Trends
	Patented Technology Trend Analysis for National R&D Strategy: Oil Exploration Technology
	Patent Strategy of High Technology
IP Creation	Search for Patent Information
	Invention and Patent
	Methods of Prior Art Search
	Use of Patent Information for Research Planning (Patent Map)
	Strategy to Apply for Patents Abroad
	How to Understand and Write the Patent Specification

[Table 4-1] Continued

classification	Detailed Education Programs
IP Protection	How to Protect Geographical Indications
	How to Protect Trademarks
	How to Crack Down on Copied Goods
	Infringement of Copyright and Prevention
IP Use	How to Discover Promising Technologies
	Evaluation of Technology Value
	Technology Commercialization

[Table 4-2] Local seminar schedule for IP experts

Date and Time	Subject	Name (Organization)
Day 1	Understanding of IP: The Role of IP in the Knowledge-based Economy	Yongsun Kim (KIPO)
	Global Intellectual Property Policy Trends	Sikyung Sung (KIPO)
	Understanding Inventions with Patents and the Educational Policy in Korea	Dr. Minki Kim (KIPA)
	Patented Technology Trend Analysis for National R&D Strategy: Oil Exploration Technology	Dr. Jaeheon Lee (KISTA)
	Collective Management Organization	Dr. Yuseon Park (KIPA)
Day 2	Understanding of IP: The Role of IP in the Knowledge-based Economy	Dr. Kwanyoung Kim (KIPA)
	Patented Technology Trend Analysis for National R&D Strategy: Oil Exploration Technology	Dr. Jaeheon Lee (KISTA)
	Understanding Inventions with Patents and the Educational Policy in Korea	Dr. Minki Kim (KIPA)
	Prior Art Search	Dr. Jaeheon Lee (KISTA)
	Instructions for Research Notes	Dr. Jaeheon Lee (KISTA)
Day 3	Understanding Inventions with Patents and the Educational Policy in Korea	Dr. Minki Kim (KIPA)
	Collective Management Organization	Dr. Yuseon Park (KIPA)
	Technology Commercialization	Dr. Kwanyoung Kim (KIPA)
	Protection of Traditional Products Using Geographical Indications in Iran	Dr. Yuseon Park (KIPA)

IP Creation is comprised of Search for Patent Information, Understanding Inventions with Patents and the Educational Policy in Korea, Prior Art Search, Patent Map, Strategy to Apply for a Patent abroad, etc. IP Protection consists of Protection Measures for Trademarks and Geographical Indications, Copyright Management, and Prevention of Infringement. IP Use is comprised of Technology Commercialization, Evaluation of Technology Value, and How to Discover Promising Technologies, etc.

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