

**THE INTELLECTUAL PROPERTY AND
INDUSTRIAL RIGHTS IN THE NATIONAL
TECHNOLOGY INITIATIVE: RECENT
EDUCATIONAL IMPROVEMENTS IN TÜRKİYE**

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THE INTELLECTUAL PROPERTY RIGHTS IN THE NATIONAL TECHNOLOGY INITIATIVE: RECENT EDUCATIONAL IMPROVEMENTS IN TÜRKİYE

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Abstract

Technological developments raise the importance of intellectual and intangible production day by day. It is critical for the future of countries to adapting this change, as the share of human production has decreased and automation and artificial intelligence has extended. Countries make a great effort to claim rights for innovative products and to increase their competitiveness. Intellectual property rights (IPR) are the key for ownership of products, economic development and promoting innovative technologies. Therefore, most developed and developing economies prioritize the IPR and innovative production. While Türkiye was at a quite low level in IPR outputs at the beginning of the 2000s, a drastic performance increase was in the last 20 years. However, Türkiye's performance is not adequate to reach the new IPR targets in the Turkish strategy documents including "11th Development Plan (2019-2023)" and "National Intellectual Property Rights Strategy Plan – Status Analysis Report". The Ministry of National Education (MoNE) has recently prioritized IPR via raising the awareness of education stakeholders, establishing monitoring mechanisms and setting targets, establishing cooperation with other stakeholders, and increasing the production capacity of educational institutions. Additionally, teacher training on IPR was intensified, R&D centers were established, and the IPR was prioritized in large-scale projects. The improvements provided solid results in a short time, and the number of IPR applications and registrations from MoNE institutions increased tremendously. Consequently, the steps of the MoNE show that concrete results can be achieved in a short time with dedicated and holistic IPR improvements. It is recommended to expand these efforts and increase cooperation in order for Türkiye to achieve its recent targets in IPR.

Keywords

Intellectual property rights, Ministry of National Education, Education institutions, Vocational education and training, Science & Art Center (BILSEM)

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Introduction

In the 1990s, the production and service sectors experienced a major transformation (de Cock Buning, 2016). Particularly, routine work in the production and service sectors was gradually undertaken by machines (Acemoğlu & Restrepo 2018; Dauth et al., 2019). After the 2000s, traditional production was replaced with intangible production (Coombe & Turcotte, 2012). The extension of automation and artificial intelligence (AI) technologies in diverse sectors has accelerated this transformation (Özer & Perc, 2020; Perc, Özer & Hojnik, 2019).

The transition from tangible to intangible products led to important challenges in determining the ownership of the productions (de Cock Buning, 2016). While it is comparatively easy to determine the features of tangible productions, it has become difficult to determine these features in intangible products. Today, where productions become more abstract, claiming ownership of the products is more challenging (Moerman & Van der Laan, 2006).

New production technologies pave the way for smoother, error-free, and faster outcomes. AI took the production process to a whole new level. These technologies promise to extend the capacity of machines and their role in the business world (Charalambous et al., 2019). Before AI, machines were used to perform predefined tasks, while these technologies enable machines to “learn” (European Parliament, 2020). Although machine learning is quite different from human learning, it still leads to a new era for machines. Because the ability of machines to learn leads to conducting more complex tasks such as decision making, risk prediction, and process improvement (Lauritsen et al., 2021; Nakashima, 1999). In this context, AI and automation brought revolutionary features to the labor market and the results become disputable.

The revolutionary characteristics of automation and AI characteristics create challenges alongside their benefits. The first result is the employment issues experienced by the employees responsible for routine work (Acemoğlu & Restrepo 2018; Dauth et al., 2019). According to a recent study by the World Economic Forum (Future Jobs-2020 Report), 85 million jobs in 26 countries will be taken over by automation and AI by 2025, while 97 million new jobs will be generated (World Economic Forum, 2020). Fact that these jobs are taken over by machines day by day, the employability of a large employee group of people with conventional skills will decrease. On the other hand, this transformation leads to new employment opportunities based on new skills (Kande & Sönmez, 2020). Consequently, increasing the employability of this employee group by reskilling and upskilling becomes an important priority.

The second result of automation and AI transformation is the change in the skills needed by the labor market (Lane & Saint-Martin, 2021; Morgan et al., 2019; Webb, 2020). The fact that machines can do routine work faster and more precisely creates the need for a change of skills. The labor market now prioritizes general cognitive skills, social-emotional skills, and digital skills (Acosta & Muller, 2018; Pichler & Stehrer, 2021; TÜSIAD, 2019). This change is extremely important for meeting the labor markets’ needs on a global scale.

In this study, we discussed the steps taken by the Ministry of National Education (MoNE) in recent years to develop intellectual properties and how these steps contribute to the Turkish National Technology Initiative.

Intellectual Property and Education

General cognitive skills are important for reasoning, and basic verbal and numerical literacy (Sum, 1999). Raising students with general cognitive skills is vital for raising a society that questions, finds solutions to problems, and improves the process. Social and emotional skills (SES) are essential for raising individuals with adequate self-regulation and empathy, collaboration, and social responsibilities (MEB, 2021; OECD, 2021). On the other hand, acquiring students' digital skills is considered a requirement in the digitized world. People work in a world that becomes more and more digital every day, and the role of digital skills is getting critical (Feijao et al., 2021). Therefore, students need to acquire digital skills for employability in the labor market.

Since education is the key to raising human resources, the quality of education is critical for technological transformation. Thus, most education systems are undergoing major revisions to cope and adapt to the changing demands of the labor market (OECD, 2015; Pastore, 2018). The major step in these revisions is to acquire students with demanding skills in the labor market (OECD, 2015). However, the transformation of the education systems in such a way requires significant time and effort. In this context, the results of the transformation depend on the concurrent improvement of curricula, training programs, and teacher training with infrastructure improvements.

The second is Intellectual Property Rights (IPR) training and policies for raising awareness of IPR (Japan Patent Office, 2018; WIPO, 2016). Different approaches are followed for the teaching of IPR globally (WIPO, 2016). For example, Japan is an important reference; The acquisitions of IPR and industrial rights are graded and embedded in education programs from primary school to higher education (Japan Patent Office, 2018). At the primary school level, the foundational concepts of IPR are taught to students in a concrete way. Then, more detailed information is provided such as the importance of IPR, the ways of their use, and the legal basis at further levels (Japan Patent Office, 2018).

The third is to ensure that both tangible and intangible productions are evaluated in the context of IPR within the scope of education. These practices are effective when students learn the skills by practice. In these cases, students understand better that the products they created can be officially registered, and commercially profitable.

Development of Intellectual Property Rights

IPR is among the most important resources that countries can use in recent technological transformations. IPR is expressed as “any kind of product developed with the human mind that is original, innovative and can create value in the labor market,” (Van Dusen, 2013). Therefore, IPR is a comprehensive concept including diverse elements; an idea, invention, substance, software, patent, etc. (Van Dusen, 2013). This flexibility of the IPR framework is a necessity rather than a choice since the innovative features require cognitive flexibility.

Protecting and expanding the IPR is one of the most important factors for economic growth in the competitive global market (Tinao et al., 2019). Today, developed countries attach more importance and allocate more budget to IPR. Additionally, it is shown that many developing and underdeveloped countries lack a systematic- and effective IPR approach (Daley, 2014). Therefore, IPR practices are significantly related to economic growth and competitiveness in the global market.

It is not a coincidence that developed and developing countries attach more attention to IPR. As emphasized earlier, the machine takes over a considerable share of jobs in the labor market and limits the value of routine jobs. The spread and globalization of information enable faster production (World Economic Forum, 2017). In this context, the demanded products in most countries can be produced much faster (World Economic Forum, 2017). The new tools including three-dimensional printers can customize the products with personal preferences (de Cock Buning, 2016).

IPR is important in protecting the rights of people who make a difference with their ideas and approaches. Today, it has become a standard to protect IPR to claim rights on innovative ideas and to have financial gain. Today, IPR is delivered through various types such as patent, utility model, trademark, and model (WIPO, 2022). No matter how innovative or unique, a claim on a product that is not defined as IPR has no legal basis. Therefore, acquiring the IPR is as important as innovative solutions and original products.

The results of the increase in the importance of IPR since the 2000s are given in Figure 1.

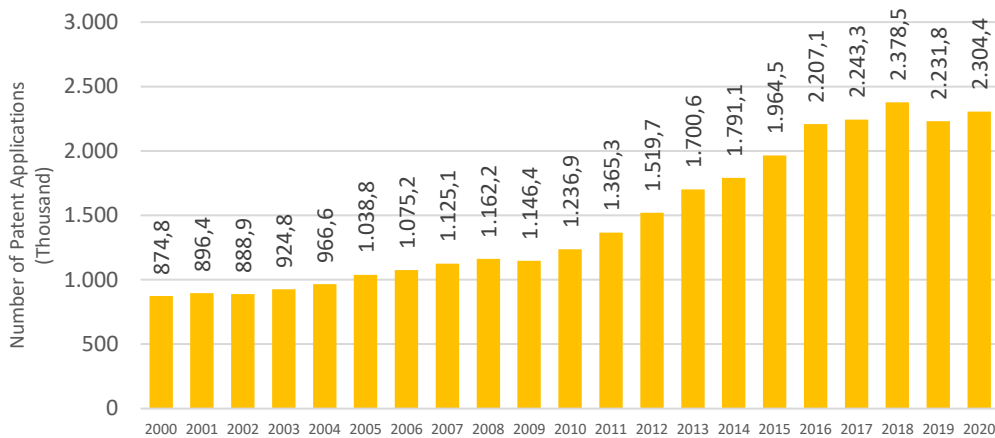


Figure 1. *Approximate number of global patent applications between 2000 and 2020 (World Bank and WIPO)*

Figure 1 indicates that the number of patent applications has increased drastically in the last 20 years. While the total number of patent applications was almost 874 thousand in 2000, it reached approximately 2.3 million in 2020. Moreover, they remained at almost the same level during the Covid-19 pandemic period between 2019 and 2020. The fact that patent applications have more than doubled in the last 20 years, provides important insight into the importance attributed to IPR along with technological transformations. In Figure 2, the change in the number of utility model applications in the last 20 years is given.

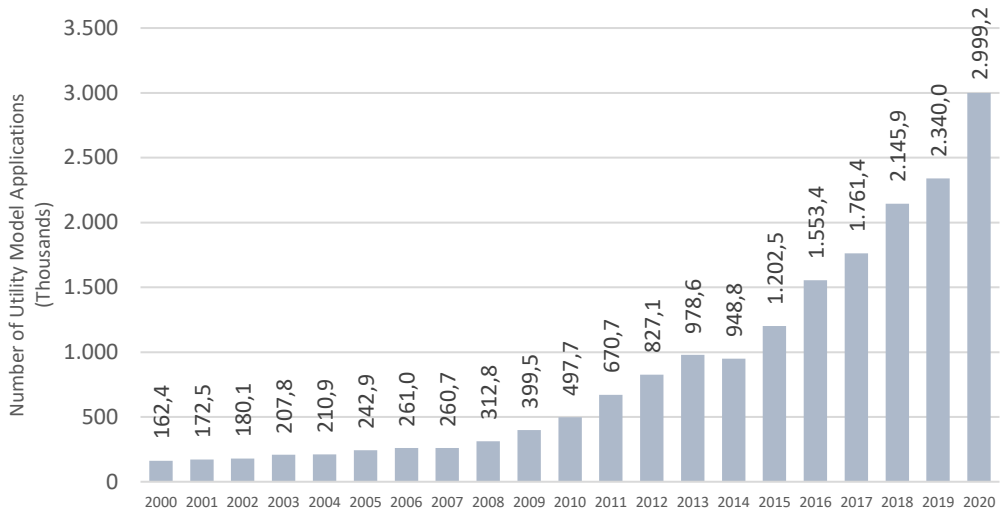


Figure 2. Approximate number of utility global model applications between 2000 and 2020

As seen in Figure 2, utility model applications have increased globally in the last 20 years. The number of applications, which was at the level of 162 thousand at the beginning of the 2000s, increased approximately 20 times to approximately 3 million in 2020. Similar to patent applications, utility model applications were not affected by the negative consequences of the pandemic. In this context, the large increases in the number of both patent and utility model applications reveal the increase in effort and importance of IPR.

Both Figure 1 and Figure 2 indicate that the global interest towards IPR has increased remarkably. Additionally, IPR outputs of countries differ significantly. Figure 3 shows the change in the number of patent applications across countries is given in last 20 years.

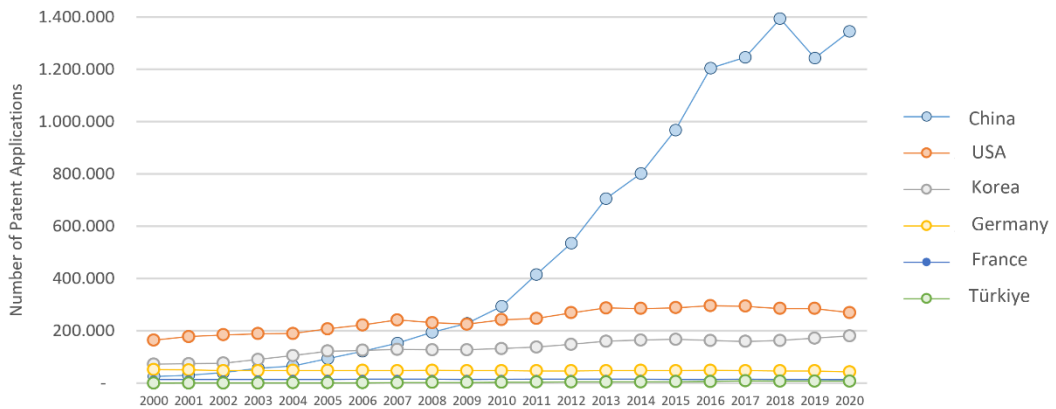
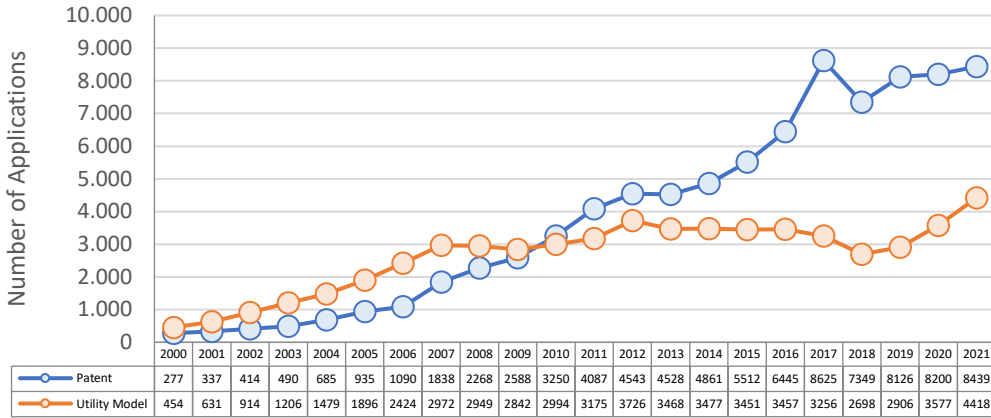


Figure 3. Approximate number of patent applications across countries between 2000 and 2020 (WIPO)

As seen in Figure 3, the number of patent applications in developed countries tend to increase in the last 20 years. However, the increase in China is incomparably greater than in any other country. While the total number of applications in China was around 25k in 2000, it increased 50 times and reached over 1.344k by 2020. In other words, one of almost every two patent applications was made by China in 2020. In the same period, the number of applications increased from approximately 165k to 270k in the USA, and from 73k to

180k in the Korean Republic. Contrary to these improvements, the number of patent applications in Germany and France in Europe has remained at a similar level in the last 20 years and has partially decreased in recent years. Türkiye’s performance over the years in terms of intellectual property products is also given in Figure 4.

a. Number of patent and utility model applications



b. Number of trademark and design applications

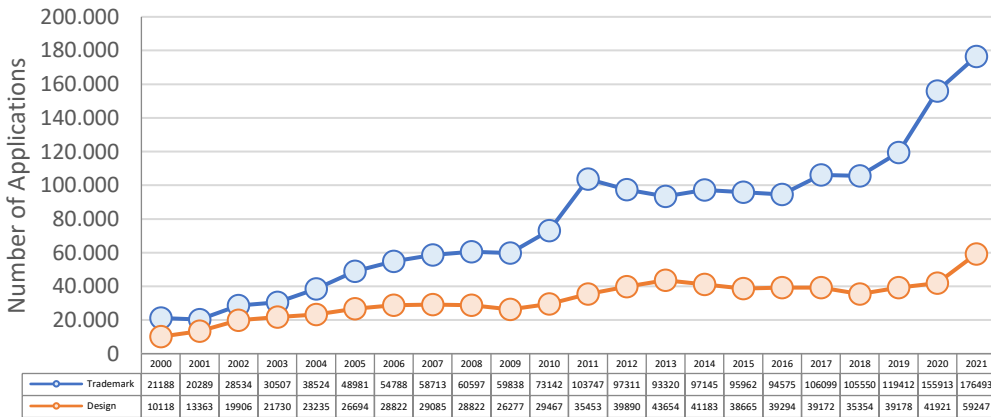
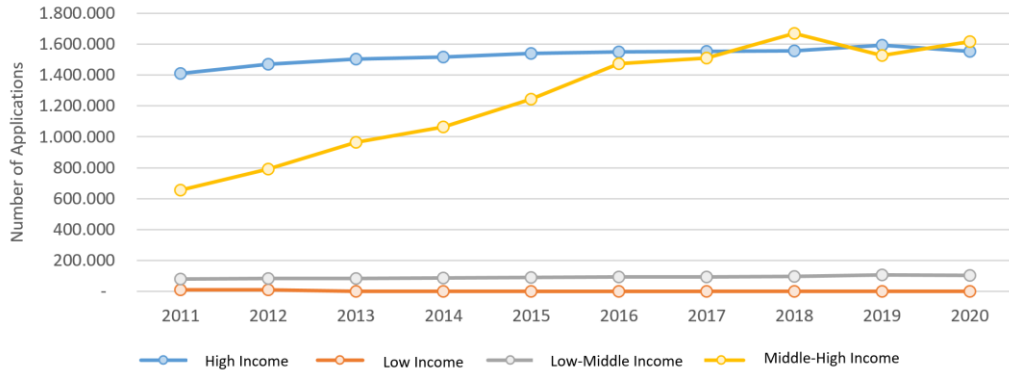


Figure 4. IPR applications in Türkiye between 2000 and 2021 (Turkish Patent & Trademark Office)

As seen in Figure 4, the number of applications for IPR products in Türkiye has increased significantly since 2000. In particular, the number of patent applications has reached 8.4k from below 500, and the number of utility models over 4k. The number of trademark and design applications in the last 20 years indicates a similar improvement. Although these improvements in Figure 4 show that efforts and awareness toward IPR have increased, the recent number of applications in Türkiye is significantly lower than in the countries in Figure 3.

Figure 5 shows the variation of IPR products by income levels of the countries.

a. Number of patent applications



b. Number of trademark applications

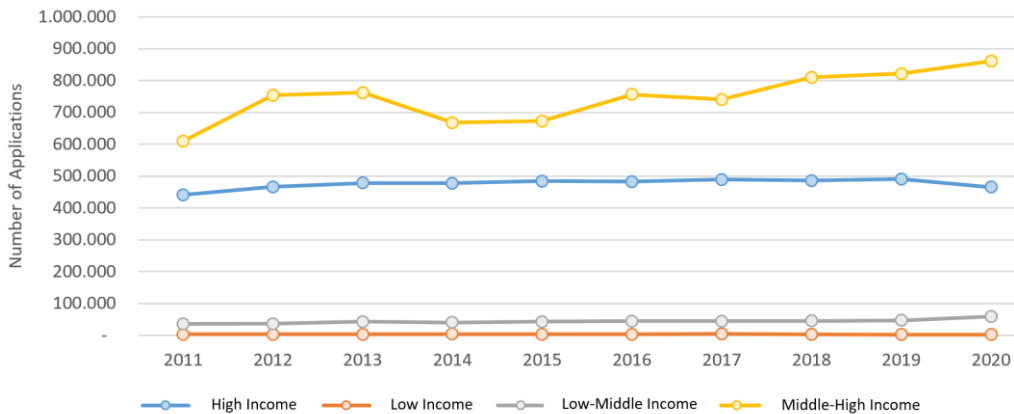
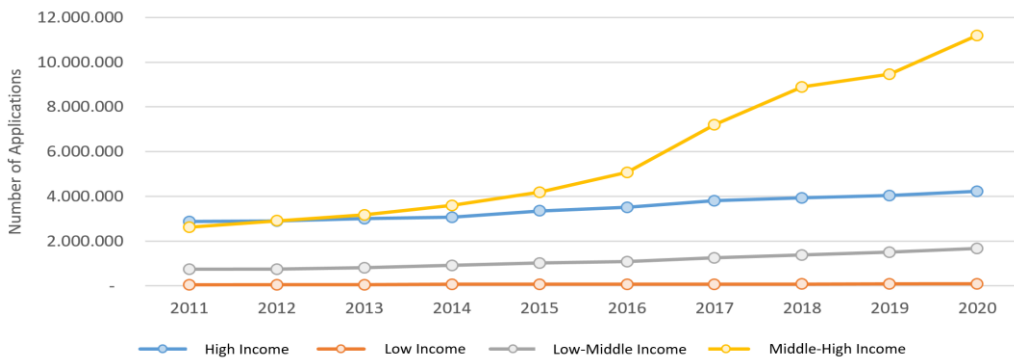


Figure 5. Applications for IPR in countries with different income levels (WIPO)

Figure 5 indicates the major differences between the number of applications for patents, trademarks, and industrial design according to the income level of the countries in the last 10 years. Middle-high income countries have a remarkably higher number of applications than other countries, particularly in patent and industrial design applications. It is also worth noting that middle-high income countries catch up with high-income countries over time and even surpass them in recent years. Today, the fact that intangible productions are becoming more important may cause the income gap between countries to deepen over

time. In this context, it is extremely important to increase IPR outcomes, which have increased significantly in the last 20 years in Türkiye. However, the IPR performance of Türkiye is still below than adequate level to be competitive on a global scale.

The Recent Steps for IPR Improvement in the Turkish Education System

In this section, we discussed the steps by the Ministry of National Education (MoNE), and their outcomes in IPR are briefly discussed.

Increasing the Quality of Production in Vocational Education and Including Intellectual Property

The Turkish vocational education and training (VET) system has gone a transformation process in recent years (Özer, 2019a, 2019b, 2020a). This transformation aims to contribute to national economic development by training the human capital needed by the labor market and minimizing skill mismatches (Özer, 2020b). One of the main purposes of this improvement is to ensure that the productions of VET not only meet the national needs but also extend the IPR awareness and culture.

The foundational improvement in the VET system is to promote both public and private sector representatives to comprehensively contribute to the system (Özer, 2020b; Özer and Suna, 2020a). In this context, the extent and coverage of collaborations with sectors have been increased. It is essential for competitiveness in terms of the use of modern technologies and methods in VET. Within the scope of the cooperation, the infrastructures of VET institutions have been improved, on-the-job training has been provided in work environments, and teacher training has been performed by sector experts. These improvements are critical for increasing the quality of production and teachers' professional development. The transfer of the sectors' experience to our institutions strengthens the production capacity and innovative approaches in the VET system.

Improvements in the production capacity of VET institutions are important for encouraging students' practical skills and IPR outcomes. In recent years, the MoNE has made significant investments to increase the production capacity of VET institutions, and it led to a significant rise in revolving funds (Özer, 2021a). Revolving fund income, which was approximately 249 million ₺ in 2018, reaching approximately 392 million ₺ in 2019, 503 million ₺ in 2020, and 1 billion 162 million ₺ in 2021. In the first nine months of 2022, the revolving funds of vocational education institutions reached almost 1,4 billion TL. In other words, the income and production capacity of the revolving fund in the VET system has increased approximately 6 times in just three years.

The outcomes of the increase in the VET production capacity were experienced during the Covid-19 pandemic (Özer, 2020c, 2020d). In this period, VET institutions have become the major producer in meeting Türkiye's urgent needs: masks, face shields, aprons, disinfectants, and disposable medical materials. The flexibility and production capacity of VET institutions contributed to the changing role of these institutions. Most VET institutions producing related materials have been transformed in a short time to produce these urgent materials. Also selected VET institutions were supported further for innovative productions such as remote-controlled respirators, N95 mask machines, air sterilization machines, contactless thermometers, video laryngoscopes, intensive care beds, and sampling units. Thus, the mask and disinfectant needs of more than fifty-four thousand educational institutions were met by VET institutions. Additionally, local demands from

external institutions were also met by VET institutions. Therefore, the urgent production demand in Covid-19 has accelerated the production in VET to a further level. During the pandemic, VET institutions started exporting their products for the first time in history. These developments have contributed to prioritizing IPR by increasing production quality and international competitiveness.

Another improvement in the VET system is the revision of training programs and reorganization of the vocational fields based on the labor market needs (Canbal et al., 2020). This step is important for students to use timely content and materials in the learning process, and new production and service methods. The share of general cognitive skills, digital and information and communications technology (ICT) skills and practical learning were increased in VET programs (Canbal et al., 2020). The purpose of the update is prioritizing learning via production and acquiring students with the up-to-date practical and digital skills. These improvements also contribute to increasing the quality of productions in VET institutions, introducing innovative approaches and increasing digital competencies. Therefore, improvements made will contribute to productions such as patents, utility models, trademark and design registration, and geographical exploration, on which ownership can be claimed.

Starting the R&D era in VET and establishing the “Intellectual Property Office” is other important steps taken within the scope of IPR. The number of R&D centers increased remarkably in less than two years and reached 55 in 2022. These centers have been converted from the VET high schools with adequate infrastructure, human resources, related vocational fields, and production capacity. The purpose of these centers is to increase the quality of production, to design and produce innovative products, and to set a model for other VET institutions. In a relatively time, approximately 25 million TL has been invested in improving the infrastructures and educational environments of the centers, the number of which has reached 55 by 2022.

The Intellectual Property Office was established in order to coordinate IPR development and tracking in R&D centers and VET institutions to provide IPR trainings. Developing a mechanism to monitor the process within the MoNE for IPR is important for evaluating the current potential and even improving it. With the establishment of the office, MoNE ensured that the awareness of educational institutions and collective effort will increased in VET institutions.

The “1.000 Schools Project in Vocational Education and Training” is among the steps for promoting IPR in VET. For the first time, this project puts the school at the center and provides support in multiple aspect to all education stakeholders. A major feature of the project is the prioritizing the VET institutions which need support in Türkiye (Özer, 2021c). Within the scope of the project, selected schools were supported with infrastructural aspect, with intense teacher training, remedial education for students, and improvement parents’ educational options. In particular, extensive trainings on IPR are included in teachers’ professional development. The participation have increased to 40 thousand in IPR trainings, which were performed through online and face-to-face. The project contributed the awareness and skills of teachers working in the disadvantaged schools, and students were provided with IPR skills with better opportunities.

The holistic effort in VET system to improve IPR from infrastructure support to raising awareness projects and the establishment of R&D centers, lead a significant improvement

in the IPR outputs in a short time. Figure 6 indicates IPR applications and registration numbers by VET institutions between 2017 and November 2022 in Türkiye.

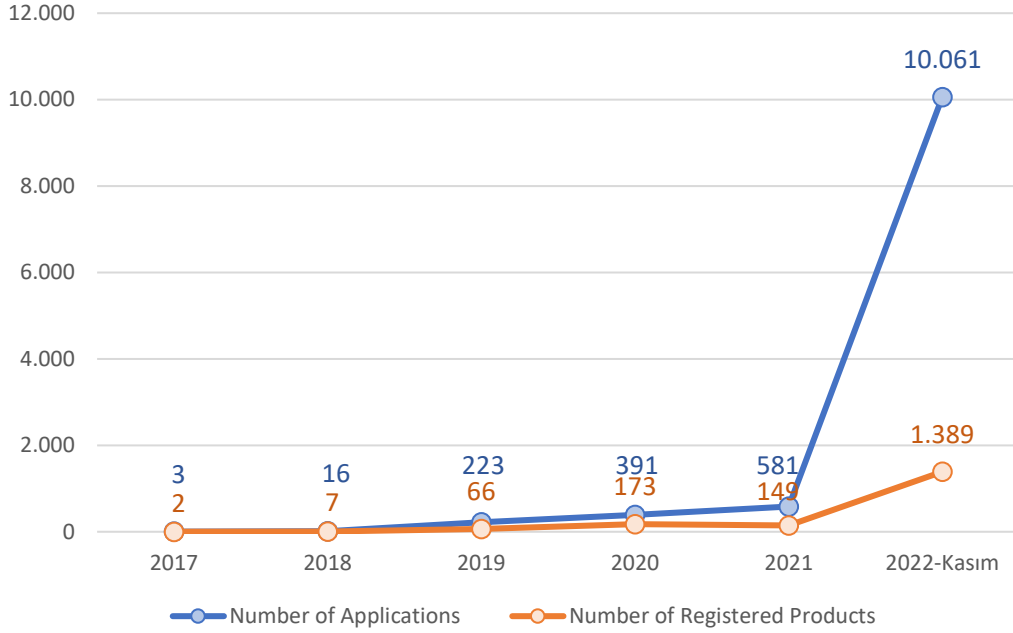


Figure 6. Number of applications and registered IPR products by Vocational Education Institutions between 2017 and 2022

As seen in Figure 6, the number of IPR applications and registrations from VET institutions has increased significantly from 2017 to 2022. While the number of applications in 2017 was below the 5k, it peaked in 2022 to more than 10k. The number of registered IPR products also reached to 1,4k. It is important noting that the total number of applications in 2022 was exceeded to total application in last five years. This indicates that the solid outcomes may be achieved cumulatively when the holistic improvement is maintained.

Increasing the Production Quality in Science and Art Centers with IPR Awareness

Science and Art Centers (BİLSEMs) are educational institutions in Türkiye that support gifted and highly talented students, and students are selected to these institutions based on the performance in a standardized assessment process (Özer, 2021d). In other words, BİLSEMs provide extra support to these students to maximize their potential. Students continue their education in their schools, they also attend BİLSEM programs at non-school times.

BİLSEMs create important opportunities for IPR through their student profile and educational opportunities. In addition, BİLSEM teachers' postgraduate education rates are above the Türkiye average and separate workshop programs are implemented in the fields of general talent, music, and fine arts. With the improved environment, students with high performance in BİLSEMs are more likely to use innovative technologies and create original products by improving their project development skills.

In recent years, the MoNE has taken two major steps to increase the IPR potential of these institutions. The first of these steps is to increase the accessibility of BİLSEMs: while there were 181 BİLSEMs in 2020, the number of BİLSEMs were doubled and reached 355 as of May 2022. Thus, the MoNE has reached pre-defined target of increasing the number of BİLSEM to 350. In 2021, the share of IPR trainings were intensified to teachers' professional development in BİLSEM program in Türkiye. The results of increased trainings and incentives become evident recently; BİLSEMs applied for 184 patents, 394 utility models, 2,063 designs and 16 trademarks during the year. In the first 10 months of 2022, the number of IPR applications increased further to almost 2,3k: 199 patent, 805 utility model, 1,2k design, and 42 trademarks. 541 of these applications were registered as IPR products. Considering that the total applications was less than 100 in 2019, the improvements yields solid outcomes in BİLSEMs.

Increasing the Production Quality of Lifelong Education Courses and Technical Institutions with IPR

Public education courses (PECs) offer important opportunities for acquiring vocational skills and employability of adults within the scope of lifelong learning in Türkiye. These courses are diversified in terms of vocational fields with a diversity of participants' age and education level. Both the employability of individuals and their potential to contribute to the Turkish economy through these skills increases (MEB, 2022).

The scale and participation to PECs is an important indicator of the great potential of these courses for IPR. Currently, PECs are presented in 1.000 Public Education Centers in 81 provinces of Türkiye and they provide a great size of participants: more than 10 million 900k in the first 10 months of 2022. The Figure 7 shows the change the participation in PECs in last three years.

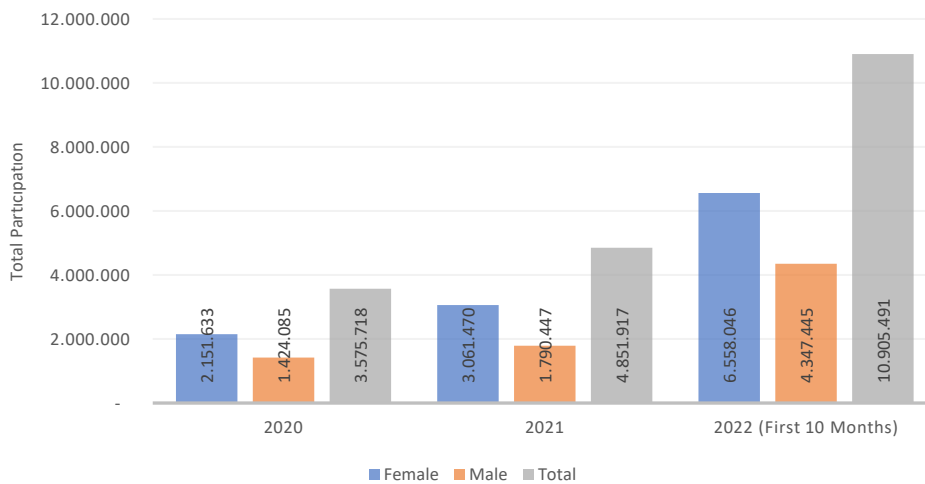


Figure 7. *The total participation in PECs in the last three years*

As seen in Figure 7, the total participation peaked in 2022. In the last ten months, the monthly average number of participation increased more than 1 million. Thus, the total participation reached almost 11 million in the last 10 months of 2022.

In addition, these courses support the women employment and educational involvement greatly; approximately 60% of the PEC participants are women. Based on recent statistics,

the courses have the potential to reach the adult population in Türkiye, with a target of at least one million citizens to attend each month.

On the other hand, the technical institutions (*Olgunlaşma Enstitüleri*) provide traditional and cultural products with innovative methods. These institutions are unique examples of VET and contribute to the transfer of cultural values between generations. Redesigning the traditional products with modern methods creates an extremely suitable environment for innovative productions. Similarly, awareness of IPR is important for the production with using new methods while keeping the originality.

MoNE started R&D activities in technical institutions taking into account the potential of productions. Teacher trainings on IPR were intensified at these institutes. In this context, both the production capacity of the institutes and the skills of the trainers have been improved. More than 7.4k applications were made from these institutes, and 6.8k products were registered. Therefore, the R&D era in technical institutions provides solid IPR improvements in a short time. Türkiye has a remarkable production culture, and now it leads to IPR with the use of production via innovative methods.

As a result of recent steps on IPR, the change in applications for IPR products by MoNE institutions is given in Figure 8.

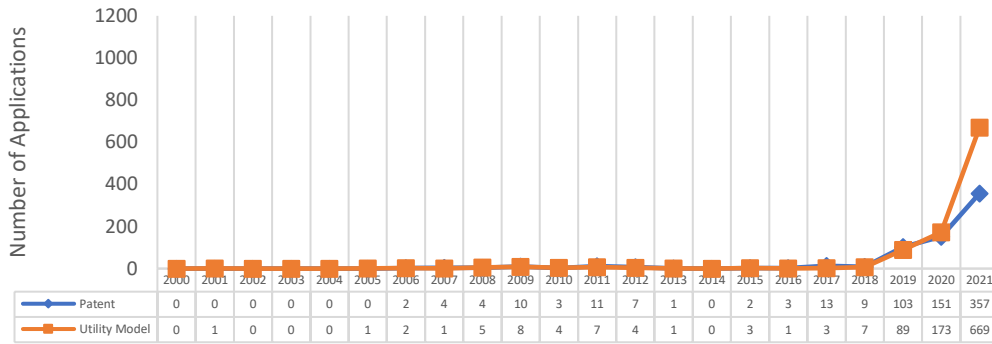


Figure 8. IPR applications by the MoNE institutions between 2000 and 2021 (*Turkish Patent & Trademark Office*)

As seen in Figure 8, the application number of patents and utility models has increased significantly as a result of the MoNE policies on IPR. It is worth noting that, MoNE institutions made more IPR applications in 2019 than the total number of applications they made in the previous 19 years. Moreover, this increasing trend still continues: In the last three years, the number of IPR applications followed further increasing trend compared to 2019.

Discussion and Conclusion

Today, the shift of production technologies to an abstract and intellectual context adds value to the economy and increases the importance of IPR. Large-scale projects have been initiated for the development of IPR products such as patents, utility models, designs, brands and industrial designs in many developed and developing countries. Findings indicating that there is a significant relationship between IPR activity and economic development have led to a focus on IPR. At this point, societal awareness of IPR becomes critical for IPR production and sustainable economic development.

It is of great importance to inform the society about IPR as early as possible. At this point, education is the key for gaining awareness and acquiring related skills. In the past, the concept of IPR is mostly associated with higher education (tertiary education) and universities. However, the knowledge and skills of IPR are extended to all education levels as it gained importance over time. Most countries, including OECD countries, have begun to include IPR in their education systems. Today, skills of IPR are acquired to students by curriculum or through large-scale projects on IPR.

Statistics on IPR products in Türkiye show that concrete improvements are provided particularly in the last 20 years. The number of applications, which was incomparably low at the beginning of the 2000s, showed a remarkable increase until 2020, thus the importance attributed to the subject has increased considerably. However, as emphasized in the policy documents such as the “Eleventh Development Plan (2019-2023)” and “National IPR Strategy and Analysis Report”, Türkiye still performs below the developed countries’ and own potential in IPR products (Ministry, 2018; TOBB, 2013).

The policy documents give important insights about what needs to be done for Türkiye to compete with economically developed countries and to achieve its own potential. Obviously, improvement in IPR depends on multiple factors and requires a joint efforts of diverse stakeholders. However, both policy documents highlighted that the importance of IPR is not adequately understood in the society and there is a great need for raising awareness projects. Additionally, the inadequate cooperation between public institutions and private sector was mentioned in these documents. Lastly, the diversity in distribution of resources and providing IPR lead to extra challenges.

In recent years, the MoNE prioritized the IPR awareness and production with use of production capacity of educational institutions towards IPR. In this context, the potential of VET institutions, BİLSEMs, science high schools, PECs and technical institutions have started to be used effectively. For the first time, MoNE set quantitative IPR targets for its institutions and monitored the progress. The establishment of 55 R&D centers with an investment of 25 million TL, the increase in the number of BİLSEMs to 355, the extending of R&D activities in technical institutes with an initial investment of 6 million TL are particular examples of the related investment. Another support policy is the training of teachers, experts and students on the prominent elements of IPR including project development and planning. Moreover, both participation and awareness of IPR in PECs was greatly increased. In this context, MoNE has taken concrete steps to overcome the highlighted limitations including lack of information and awareness.

MoNE has also made significant improvements in IPR in line with the suggestions mentioned policy documents. Collaboration is improved with both public and private sector representatives in different levels of education in VET. In this process, the scope of collaborations between Ministries as well as between MoNE and private sector representatives have been extended. This is important in the context of integrating the knowledge and experience of different institutions to serve a common purpose. In addition, the “Intellectual Property Office”, which was established in cooperation with the Turkish Patent and Trademark Office, ensures the monitoring and promoting of the IPR productions and the necessary organization to achieve the targets. This prevents from the challenges coming from diversity in resource allocation and process monitoring, which is considered as a problem in policy documents.

The prioritization of IPR by the MoNE yields concrete outputs in a short time. In 2021, BİLSEMs applied for the registration of 2.6k products, including 184 patents, 394 utility models, 2.063 designs and 16 brands, and registered 1,3k products. In 2022, the performance increased and almost 2,3k applications were made in just 10 months. Considering that a total of 98 applications were made from BİLSEMs in 2019, the improvement is obvious. When all MoNE institutions are considered, more than 14k applications were made, and approximately 11,6k products were registered as IPR products in the first ten months of 2022. Thus, the pre-decided target of 7,500 registrations of MoNE for the year 2022 was completed only in the first three months, and reached to a superior level in the ten months.

As mentioned in the Eleventh Development Plan, the joint effort of institutions is vital for Türkiye to become one of the leading countries in IPR, to be among the top 10 countries in at least one sector, and to reach 25k patent applications in 2023. As seen in the steps by the MoNE, both infrastructural support, teacher training and awareness projects are provided. As an addition, the cooperation between public and private institutions in different sectors is improved and extended. The recent outcomes indicate that significant improvements are possible in a short time when the necessary dedication and effort is attached.

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