

## STATE AND PERSPECTIVES OF USING THE INDUSTRIAL PROPERTY OBJECTS IN PRC AND UKRAINE

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*Summary. This article deals with the comparative characteristics of using the industrial property objects in PRC and Ukraine; the necessity of improving its legislation ensuring is highlighted.*

**Key words:** *industrial property, industrial property object (IPO), patent, copyright, industrial design right, patent cooperation.*

**The Problem Statement.** The globalization processes, one of the manifestations of which is transnational production, the rapid growth of TNCs' impact on national economies actualizes the tasks to revitalization of scientific and technical progress, information re-orientation of society, rapid development of science and scientific research, scientific work, the widest possible use of its results in all areas, in the first turn in productive. It is generally accepted that the development of the intellectual sphere is today a crucial factor in improving the technological competitiveness and investment attractiveness of the country. To achieve a technological superiority is possible by using of intellectual activity results, i.e. the industrial property objects (hereinafter IPO).

In this connection problems of increase their management efficiency become more and more important. In this sense economy of China may be a good example for Ukraine. It develops rapidly now and undergoes structural changes exactly on the basis of active public policy in the sphere of innovative activities and protection of intellectual property.

**Analysis of the last researches and publications.** Much attention in the world and Ukrainian scientific literature is paid to the problems of intellectual essence, including industrial one, to the property and various aspects of its use and protection. In particular they found their reflection in the works

of A. V. Parkhomenko, V. D. Parkhomenko, I. V. Zhylyayeva, O. O. Pidoprygora and others. At the same time it is possible to draw the conclusion that efficient means of effective management of industrial property have not been offered yet and it dictates strong necessity of continuation of researches in given direction.

The aim of the article is on the basis of analysis of the modern state of the use of industrial property objects in China and Ukraine; to find out basic tendencies that were formed in the sphere of its use, management and motivation of recommendations concerning the necessity of improvement of government control mechanisms in this sphere.

**Grounds of the received scientific results.** Industrial property (IP) – one of the types of intellectual property that can be defined as the results of scientific and technical work which can be used to the society advantage in any people' activity [1]. Right of industrial property in the objective meaning is a set of legal norms regulating public relations that are formed in the process of creation, processing and using of the results of scientific and technical work. In the subjective meaning the right of industrial property is determined as the right which is available to the author of any result of scientific and technical activity according to the legislation.

Thus industrial property can be defined as a product of intellectual work in technical and economic

activities that gives to its proprietor an opportunity to produce goods that advantageously differ in their consumer qualities from their analogues at the market. The objects of industrial property are: inventions, signs for commodities and services, industrial prototypes, useful models, brand names, names of places of commodities origin, know-how.

The developed countries' experience shows that corporate structures (especially multinationals) play, first and foremost, the leading role in creating Industrial Property Rights (IPRs), their sales and use to produce innovative products. Therefore, establishing, effective functioning and developing of national intellectual property protection system are impossible without harmonized legislative and regulatory basis concerned to international treaties [3].

The most obvious indicator of the country's scientific and technical potential is national applicants' inventive activity. It should be noted that in Ukraine, the dynamics of the submitted applications for IPRs to some extent iterates total economic dynamics (Fig. 1). Actually, during the financial crisis of 2009 the increasing number of applications in the course of growth and decline is being noticed. In Ukraine a similar trend was observed in 1990s.

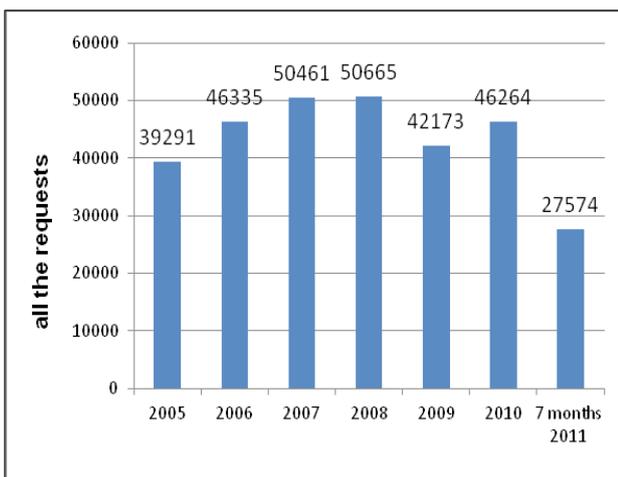


Fig. 1. Dynamics of the number of applications for Industrial Property Rights in Ukraine (2005-2010) Source: [4].

Unlike Ukraine, the steady increasing in applications for IPRs (see Fig. 2) is inherent for the People's Republic of China (PRC), despite the favorable or unfavorable external market conjuncture,

because, on one hand, the fact of decline in GDP in this country has not been caused to by the global financial economic crisis, and only slow down in its growth has been taken. On the other hand, the PRC government draws on the primacy of innovation activity in the country.

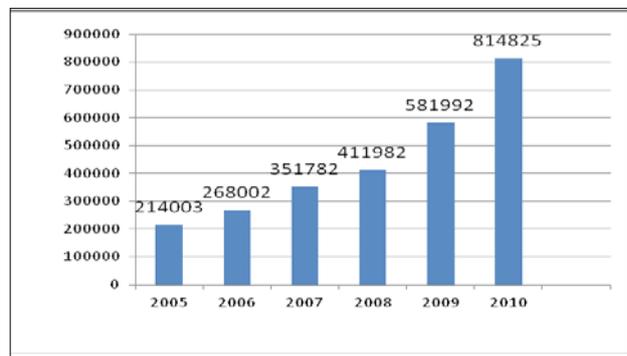


Fig. 2. Dynamics of the number of applications for Industrial Property Rights in People's Republic of China (2005-2010) Source: [4].

However, it should be noted that even in the best period of economic growth, the growth of applications for IPRs in Ukraine were much lower than in PRC. Thus, if in 2010 the number of applications in People's Republic of China increased by more than 38%, in Ukraine – only 3.97% (Fig. 2). This is despite the fact that Ukraine has been higher values of education and number of people with higher education per capita it is steadily growing number of Candidates' and Doctors' Degrees (from 77,442 in 2005 to 99,874 in 2010) than in China [4].

This is despite the fact that the total number of scientists and research organizations in Ukraine during this period was being decreased (from 105,512

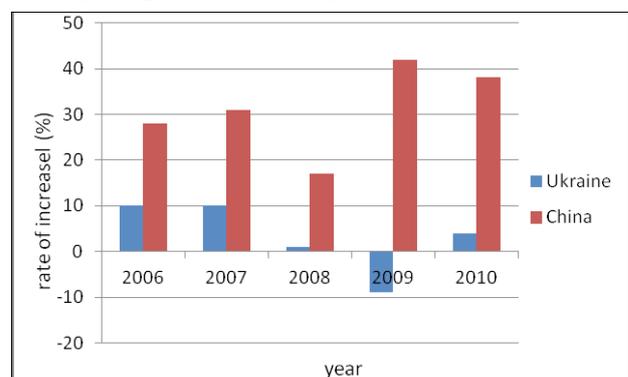


Fig. 3. The rate of growth in the number of applications for industrial property in Ukraine and China (2006-2010). Source: Calculated on the basis of [4].

persons in 2005, to 89,534 persons and in 2010 – from 1510 persons to 1303 persons accordingly) [4].

In general, in the course of independent years the total number of Ukrainian scientists was reduced by 2.5 times and nowadays it is being declined (Fig. 3). This is a consequence of low prestige of scientific work, because of its low level of payment, and the outflow of scientists abroad, including China.

If such a gap in the growth rate of applications for industrial property will continue, this gap will become irreversible in the near future. Although in Ukraine the amount of scientific and technical work has increased in real prices, their share in GDP has declined from 1.16% in 2000 to 0.9% in 2010. At the same time, during the same period the number of enterprises engaged in innovation has reduced from 18 to 13.8%. [5].

The number of companies introducing innovation has decreased (from 14.8% in 2000 to 11.5% in 2010). And if there was a rapid increase in public funding of innovation (nearly quadrupled) in 2006, it is rapidly reducing (from 336.6 million in 2008 to 87 million in 2010) now [4].

Ukraine and China have about the same rate of applications for industrial property per capita (table 1) but it can be explained by the fact that Ukraine has the opposite demographic situation (the population is declining in Ukraine and increasing in China) rather than positive changes in this sphere.

**Table 1**  
**Registration of applications for industrial property objects (IPO) per capita (2005-2010).**  
**Source: Calculated on the basis of [3; 4 ; 9]**

	Ukraine	China
<b>2005</b>	0,00027	0,000161
<b>2006</b>	0,000299	0,000204
<b>2007</b>	0,000332	0,000267
<b>2008</b>	0,000337	0,000031
<b>2009</b>	0,000307	0,000438
<b>2010</b>	0,000320	0,000605

In general over the last 18 years (1992-2011) in Ukraine was registered 564397 applications for industrial property objects (IPO). For the last 11

months one had accepted 27574 applications. Among them: 3101 applications for inventions (including 2134 according to the national procedure and 9203 applications according to the PCT, 6445 applications for useful models, 942 applications for industrial design rights, 17083 – signs for goods. The general number of documents concerning IPO protection registered for the last 7 months 2011 was 27574 (Fig. 4) [1].

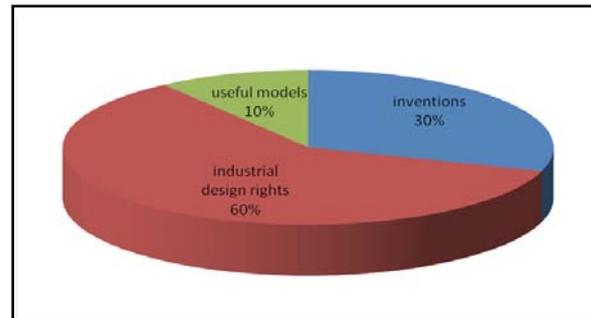


Fig. 4. Distribution of IPO among inventions, industrial design rights and useful models in Ukraine (2010) Source: Calculated on the basis of [4]

In China more than 288, 000 IPO were registered in 2010. Among them: 135, 000 patents for invention, 344, 000 patents for useful models, 335, 000 patents for industrial design rights [9]. The structure of applications for IPO in PRC in 2010 is shown in Fig.5

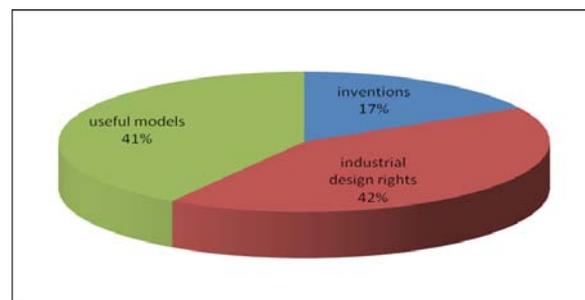


Fig. 5. Distribution of IPO among inventions, industrial design rights and useful models in PRC. Source: Calculated on the basis of [9]

We notice that in contrast to China, in Ukraine the greater part (60%) of all the applications are due to useful models and only 10% for industrial design rights. 30% of all the applications for IPO in Ukraine is for inventions. In PRC to the IPO belong 41%

applications, and to the inventions belong 17% [4].

The dynamics of an application submission in the countries with developed systems of industrial property protection (Table 3 [6]) shows the strategic role of patents for business practice of the companies in these countries, taking into account the possibility of ensuring the international patent rights protection in 128 countries.

According to the number of applications among 50 leading world companies (15 of which are shown in table 4 [7]) over a third is occupied by the companies of the USA, 13 places are taken by the companies of Japan, and 7 places – by the companies of Germany. The world tendency of patents proves that the most predominating spheres are such branches as information-communication technologies and biotechnologies which

**Table 3**

**International applications according to the PCT based on the place of incorporation of an applicant**

Country	2006	2007	2008	2009	2010
The USA	41296	41028	43350	46697	49555
Japan	14063	17414	20263	24841	26906
Germany	14326	14662	15218	16002	16929
China	1018	1295	1706	2493	3910
Ukraine	75	58	89	59	65

**Table 4**

**Leading companies-applicants according to PCT in 2010**

2010 Rating	Turnabout	Name of applicant	Country of origin	Number of applications in comparison with 2006	Growth 2010 in 2009
1	0	Koninklijke Philips Electronics N.V.	The Netherlands	2495	3
2	0	Matsushita Electric Industrial Co., Ltd.	Japan	2344	324
3	0	Siemens Aktiengesellschaft	Germany	1480	81
4	0	Nokia Corporation	Finland	1036	137
5	0	Robert Bosch GmbH	Germany	962	118
6	2	3m Innovative Properties Company	The USA	727	122
7	0	Basf Aktiengesellschaft	Germany	714	58
8	11	Toyota Jidosha Kabushiki Kaisha	Japan	704	305
9	-3	Intel Corporation	The USA	690	-6
10	-1	Motorola, Inc.	The USA	637	57
11	6	Mitsubishi Denki Kabushiki Kaisha	Japan	616	178
12	9	Qualcomm Incorporated	The USA	608	229
13	24	Huawei Technologies Co., Ltd.	China	575	326
14	-1	Telefonaktiebolaget Lm Ericsson (Publ)	Sweden	572	61
15	9	Fujitsu Limited	Japan	571	213

According to the number of applications among 50 leading world companies (15 of which are shown in table 4 [7]) over a third is occupied by the companies of the USA, 13 places are taken by the companies of Japan, and 7 places – by the companies of Germany.

have been rapidly developing for last 10 years. Ukraine also witnesses the activation of submitting applications for the inventions in such technical areas as computer equipment, aviation-missile, means of automation, communication equipment, etc. [5].

The world tendency of patents proves that the most predominating spheres are such branches as information-communication technologies and biotechnologies which have been rapidly developing. As far as the applications are concerned the most active companies in the developing countries were Chinese («China Network Communications Group Corporation», «Shanghai Tyre & Rubber Co.», «Xiamen Xingyatai Plastic Industry Co.»), Korean («ESTsoft Corp.», «TMAX SOFT CO.»), Singapore («Asia Pacific Breweries») and Moroccan companies.

Chinese companies are using more potential of industrial property. Thus, according to the estimation of the Chinese telecommunications company «Huawei Technologies» representative [9], the corporate strategy in the sphere of industrial property management plays a leading role in the research and development of the company. In 2010 «Huawei» invested 2,5 billion US dollars in research and development. Since 2002 «Huawei» has been among the first in the list of Chinese enterprises that have submitted national patent applications and has occupied the fourth place among PCT users in developing countries. Taking into account PCT advantages, the corporation intends to submit 200-500 applications annually.

It is worth pointing out that industrial property should be used as a strategic resource of the enterprise that plays an important role in successful competition on the markets, primarily for the companies of the corporate sector of economy. Setting IPO to balance is a significant issue. It is of special importance for joint stock companies, as the value of returns on capital depends on the efficiency of IPO rights disposal.

To solve most above-mentioned problems in Ukraine is considered to be necessary the economic levers improvement of intellectual property protection, that requires: a) to work out the system of economic stimuli of commercialization of the patented scientific and technical achievements; b) to create the fund to promote patenting of inventions abroad on self-supporting basis; c) to envisage in the state budget the proper financing of charges on infrastructure development of intellectual property protection.

The question concerning the definition of expediency and opportunity of accession of our state to the European Patent Convention and Ukraine's membership in the European Patent Organization (EPOrg) appeared before Ukraine within the framework of European integration.

For this it is necessary to provide the adaptation of Ukrainian legislation to the EU legislation in this sphere and to provide simplification, acceleration, maximum of convenience to the applicants of acquisition procedures of the rights to IPO. It is also necessary to ensure maximum formalization for subdivisions of state system of legal protection of the intellectual property procedures for expert examination of applications for industrial property and all legal relations system with the persons who receive services on the acquisition, realization and protection of rights to objects of intellectual property.

It should also examine the issue of Ukraine's accession to the new international treaties, in particular to the European Patent Convention, to the Lisbon agreement on the protection of geographical indications etc.

The state must spare the special attention to creating conditions for training of scientific personnel in the field of intellectual, including industrial property, financial and methodical providing.

**Conclusions.** The value of industrial property for innovative development at the macro and micro levels is determined by the presence of interdependence between the level of patent and licensing activity and innovative activity of entrepreneurs. This deterrent to corporate structures is underdeveloped system of industrial property markets and IPRs, as evidenced by the results of comparative analysis of patent and licensing activity at the macro level.

Analysis of the situation regarding the number of registered Industrial Property Rights in China and Ukraine demonstrates the relevance of new mechanisms to stimulate the activity of businesses and individual inventors towards the creation of objects of industrial property management companies focused corporate sector on innovation

with an understanding of values intangible assets as a basis for competitiveness and strengthen market positions.

The government policy requires changes regarding to the disposal of Industrial Property Management companies that are the part of corporate sector, co-

owner (shareholder) owned by the state. Special attention should be given to the use of economic instruments of indirect nature due to the urgent need to develop markets IPRs, given the experience of individual countries and companies leading the world market.

#### References

1. Державний департамент інтелектуальної власності /www.sdip.gov.ua.
2. Підпригора О. А., Підпригора О. О. Право інтелектуальної власності України: Навч. посібник для студентів юрид. вузів і фак. ун-тів. – К.: Юрінком Інтер, 1998. – 336 с.
3. Федулова. Л. І. Корпоративні структури в національній інноваційній системі України – К.: вид-во УкрІНТЕІ, 2007. – 812с.
4. Офіційний сайт Держкомстату України: [Електронний ресурс]. – Режим доступу: /ukrstat.gov.ua
5. Український інститут промислової власності (УКРПАТЕНТ). <http://www.ukrpatent.org/ua/index.html?fp=41&s=print>.
6. Офіційний ВЕБ-ПОРТАЛ державної служби інтелектуальної власності України. <http://www.sdip.gov.ua/ua/table7>.
7. Intellectual Property – A Power Tools for Economic Development. WIPO. – 2002. – 377p. [Електронний ресурс]. – Доступний з: [http://www.wipo.int/about-wipo/en/dgo/wipo\\_pub\\_888.pdf](http://www.wipo.int/about-wipo/en/dgo/wipo_pub_888.pdf).
8. The People's Bank of China /www.pbc.gov.cn.
9. China economic information network/www.cei.gov.cn.
10. National Bureau of Statistics of China/www/stats.gov.cn.