

2023

INTELLECTUAL PROPERTY IN FIGURES

Activity indicators in the field of intellectual property in the first quarter of 2023





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State Organization "Ukrainian National Office for Intellectual Property and Innovations"

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Kyiv – 2023

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I. Main Performance Indicators

1. Common Tendencies

Since the onset of the war, in which Ukraine has been resisting a full-scale invasion by the russian federation, the economy of Ukraine is experiencing heavy losses, and the state of activity in the sphere of industrial property is affected significantly.

At the beginning of 2023, there was an increase in activity in the field of industrial property compared to the challenging year of 2022. More than 6.4 thousand applications for industrial property rights were filed during the first 3 months of 2023. Although there was an increase in activity in filing applications for industrial property rights in the first quarter of 2023 compared to the same period of the previous year, the indicators were still significantly different from the pre-war levels (table 1, figure 1). Comparing the first quarters of 2022 and 2023, the total number of filed applications increased by 10.1%: for inventions – by 15.5%, for utility models – by 42.7%, for national trademark applications – by 8.1%, while the number of filed applications for industrial designs decreased by 20.9%.

Table 1. Applications for Industrial Property Rights Protection in the First Quarterfrom 2019 to 20231

	2019	2020	2021	2022	2023 ²	2023 to 2022
Total	11,000	9,131	9,738	5,882	6,475	110.1%
Inventions	952	703	724	581	671	115.5%
Utility Models	2,206	1,446	961	483	689	142.7%
Industrial designs	515	580	474	326	258	79.1%
Trademarks (under the national procedure)	7,327	6,402	7,579	4,492	4,857	108.1%

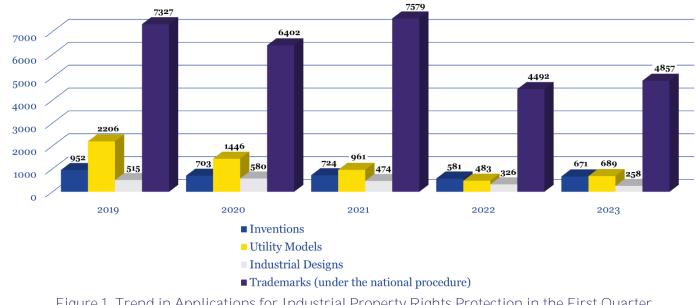


Figure 1. Trend in Applications for Industrial Property Rights Protection in the First Quarter from 2019 to 2023

¹ Data for previous years have been updated

² Previous data

The trend of industrial property rights protection registrations directly depends on the number of applications filed. However, despite the challenging times and military actions UANIPIO continued its functionality showing high responsibility and professionalism.

More than 4.4 thousand protection titles were granted in the first quarter 2023. The total number of granted protection titles compared to the same period of the previous year decreased by 34%: for utility models – by 15.3%, for industrial designs – by 42.2%, for national trademark applications (under the national procedure) – by 38.8%, while the number of protection titles granted for inventions increased by 4.9% (table 2, figure 2).

Table 2. Industrial Property Rights Protection Registrations in the First Quarterfrom 2019 to 2023

	2019	2020	2021	2022	2023	2023 to 2022
Total	8,009	7,254	8,720	6,785	4,476	66.0%
Inventions	621	510	666	427	448	104.9%
Utility Models	2,407	1,942	1,256	615	521	84.7%
Industrial designs	639	388	600	206	119	57.8%
Trademarks (under the national procedure)	4,342	4,414	6,198	5,537	3,388	61.2%

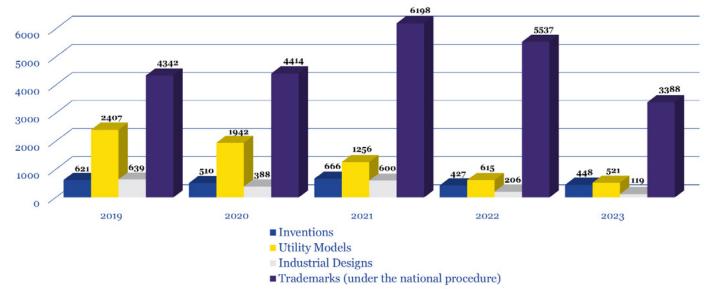


Figure 2. Trend in Industrial Property Rights Protection Registrations in the First Quarter from 2019 to 2023

2. Inventions

Comparing with the corresponding period of the previous year, there was an increase in activity of resident applicants by 34% and an increase in activity of non-resident applicants by 9.1%. The overall number of applications for inventions in the first quarter of 2023 was approaching the pre-war levels. In the first quarter of 2023, the inventive activity of non-resident applicants continued to exceed the resident one, as it had been for the past 4 years (table 3, figure 3).

	2019	2020	2021	2022	2023 ²	2023 to 2022
Total	952	703	724	581	671	115.5%
Under the national procedure	591	374	347	211	235	111.4%
Resident applicants	553	317	282	141	189	134%
Non-resident applicants	38	57	65	70	46	65.7%
Under the PCT procedure	361	329	377	370	436	117.8%
including resident applicants	_	-	2	-	2	-

Table 3. Patents Filed in the First Quarter from 2019 to 20231

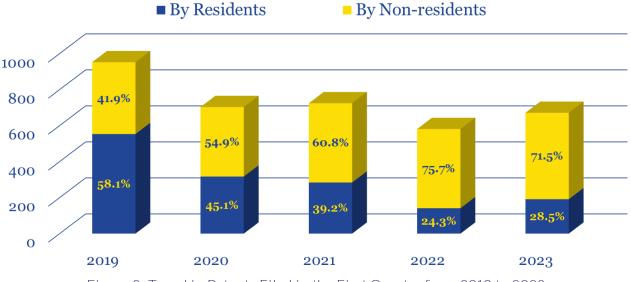


Figure 3. Trend in Patents Filed in the First Quarter from 2019 to 2023

The share of non-resident applicants in the total number of applications for inventions increased by 9.1% and amounted to 71.5%, while the share of resident applications increased by 35.5% and amounted to 28.5%.

Compared to the first quarter of the previous year, the number of non-resident applications filed under the PCT procedure increased by 17.8% and amounted to 90.4% (figure 4).

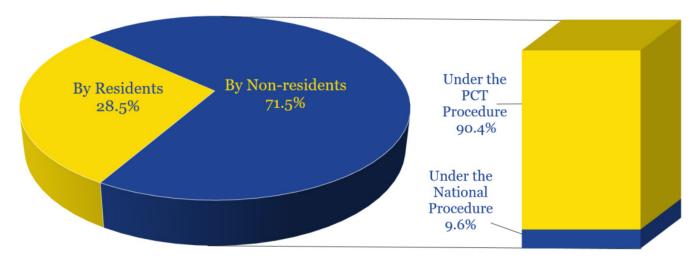


Figure 4. Correlation between Resident and Non-resident Applicants in the First Quarter of 2023

In the first quarter of 2023 leaders among non-resident applicants remained the United States of America (-16.1% compared to the previous year), Germany (+31.4%), China (+47.7%), France (+6.3%) and Japan (-26.7%). It is worth mentioning that the number of applications from the United Kingdom (+137.9%), Luxembourg (+100%), Republic of Korea (+250%), Sweden (+500%) and India (+83.3%) increased significantly (table 4, figure 5).

2023 to 2023² Total 109.1% United States of America 83.9% United Kingdom 237.9% 131.4% Germany Switzerland 147.7% France 106.3% Luxembourg 200.0% Republic of Korea 350.0% Sweden 600.0% China 37.9% India 183.3% 73.3% Japan 225.0% Italy 266.7% _ _ Slovakia 46.7% Belaium Other 62.3%

Table 4. Non-resident Applications by Origin in the First Quarter from 2019 to 20231

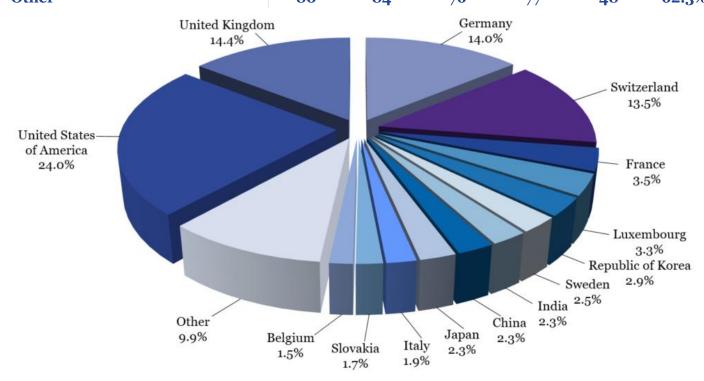


Figure 5. Non-resident Applications by Origin in the First Quarter from 2019 to 2023

Distribution of resident and non-resident applications for inventions by technology fields in the first quarter from 2019 to 2023 is presented in annexes 1 and 2.

Total number of patents granted in the first quarter of 2023 exceeded the same period of the previous year by 4.9%. Meanwhile the number of patents granted to non-resident applicants increased by 25.3% and amounted to 69.6% of the total number of patents granted for inventions (table 5, figure 6).

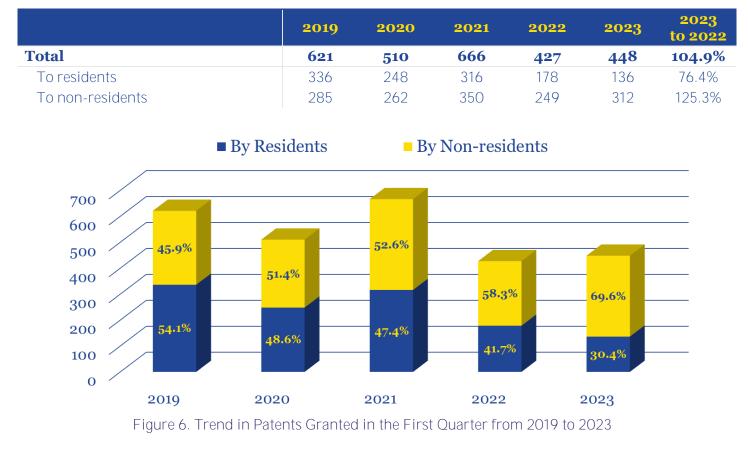


Table 5. Patents Granted in the First Quarter from 2019 to 2023

3. Utility Models

The indicators of applications filed for utility models are similar to the indicators of applications filed for inventions: compared to the previous year, the total number of applications increased by 42.7%, and there was an increase in inventive activity of resident applicants by 44.2% (table 6, figure 7). Share of non-resident applicants, as in previous years, is insignificant – 2.5% (17 applications). Although there was an increase in inventive activity the number of applications for utility models was still relatively low, compared to pre-war years.

		-		-		
	2019	2020	2021	2022	2023 ²	2023 to 2022
Total	2,206	1,446	961	483	689	142.7%
Under the national procedure	2,206	1,441	961	482	687	142.5%
By residents	2,185	1,390	939	466	672	144.2%
By non-residents	21	51	22	16	15	93.8%
Under the PCT procedure	-	5	-	1	2	200%

Table 6. Applications for Utility Models in the First Quarter from 2019 to 20231

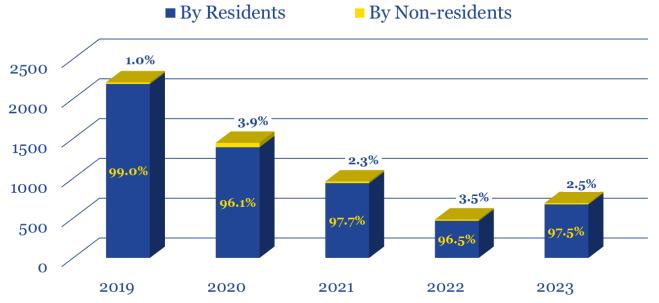


Figure 7. Trend in Applications for Utility Models in the First Quarter from 2019 to 2023 The indicators of patents granted for utility models have a decreasing trend – at the beginning of 2023, over 500 patents were registered (table 7, figure 8).

Table 7. Utility Models Registrations in the First Quarter from 2019 to 2023

	2019	2020	2021	2022	2023	2023 to 2022
Total	2,407	1,942	1,256	615	521	84.7%
To residents	2,357	1,915	1,183	603	513	85.1%
To non-residents	50	27	73	12	8	66.7%

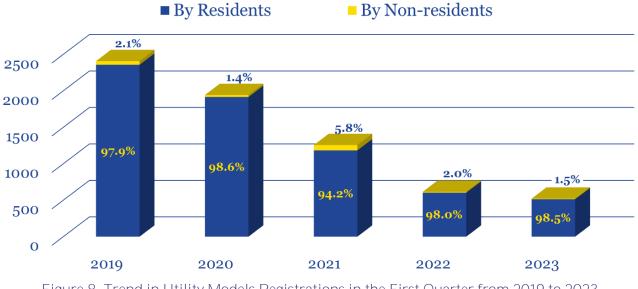


Figure 8. Trend in Utility Models Registrations in the First Quarter from 2019 to 2023

4. Industrial Designs

The indicators of applications for industrial designs in the first quarter of 2023 were quite low, however the number of non-resident applicants increased by 52.9% (52 applications), with the share of non-resident applicants being the highest in the last 5 years (table 8, figure 9).

2023 2019 2020 2021 2022 2023² to 2022 Total 580 474 326 258 79.1% 515 70.5% By residents 460 497 429 292 206 including legal entities 104 109 148 73 45 61.6% By non-residents 55 83 45 34 52 152.9% By Residents By Non-residents 14.3% 10.7% 600 9.5% 500 10.4% 400 20.2% 300 85.7% 89.3% 90.5% 200 89.6% 79.8% 100 0 2023 2019 2020 2021 2022 Figure 9. Trend in Industrial Designs Applications in the First Quarter from 2019 to 2023

Table 8. Applications for industrial designs in the First Quarter from 2019 to 2023¹

In the first quarter of 2023 the number of registered industrial designs was relatively low – 119 in total. The total number of registered industrial designs decreased by 42.2%, comparing to the previous year, while the number of certificates granted to non-resident applicants increased slightly (table 9, figure 10).

	2019	2020	2021	2022	2023	2023 to 2022
Total	639	388	600	206	119	57.8 %
To residents	602	355	539	196	105	53.6%
To non-residents	37	33	61	10	14	140.0%

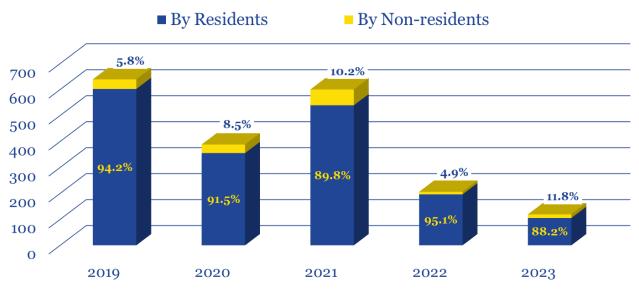


Figure 10. Trend in Industrial Design Registrations in the First Quarter from 2019 to 2023

5. Trademarks

In the first quarter of 2023 the indicator of filed applications for trademarks was still below the pre-war one, however comparing to 2022, it increased by 8.0%. More than 4.8 thousand applications were filed, of which more than 4.3 thousand (89.6% of the total) were from resident applicants; meanwhile there was a decrease in applications from non-resident applicants by 32.1% compared to the previous year (table 10, figure 11).

Table 10. Trademark Applications (under the National Procedure) in the First Quarter from2019 to 20231

	2019	2020	2021	2022	2023 ²	2023 to 2022
Total	7,327	6,402	7,579	4,492	4,857	108.1%
By residents	6,506	5,435	6,532	3,745	4,350	116.2%
By non-residents	821	967	1047	747	507	67.9%
By]	Residents	By	Non-resid	dents		
11.2%		13.8%				
8000	15.1%					
7000						
6000			16	.6%	10.4%	
5000						
4000		06 - 06				
88.8 %	84.9%	86.2%				
2000			83.49	6	89.6%	
1000						
0 /						
	2020	2021	2022		023	- et e e
Figure 11. Trend in Trademarl		under the N 2019 to 2023		cedure) in t	ne First Qua	arter

The most active non-resident applicants in the first quarter of 2023 were applicants from the United States of America – 100 applications (19.7%), the United Kingdom – 55 applications (10.8%), Cyprus – 52 applications (10.3%), Switzerland – 47 applications (9.3%), Germany – 32 applications (6.3%), Poland – 28 applications (5.5%), China – 26 applications (5.1%), Hong Kong, China – 19 applications (3.7%), Japan – 15 applications (3%), India – 12 applications (2.4%) (figure 12, annex 9).

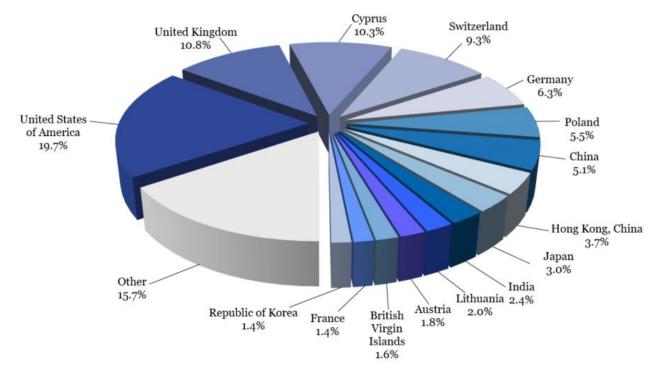


Figure 12. Trademark Applications (under the National Procedure) by Non-residents by Origin in the First Quarter from 2019 to 2023

Despite the challenging situation in the country the total number of trademark registrations in the first quarter of 2023 almost exceeded 3.4 thousand (table 11).

						19 00 2020
	2019	2020	2021	2022	2023**	2023 to 2022
Total	4,342	4,414	6,198	5,53 7	3,388	61.2%
By residents	3,762	3,820	5,327	4,618	2,699	58.4%
By non-residents	580	594	871	919	689	75.0%

Table 11. Trademark Registrations (under the National Procedure) in the First Quarter from2019 to 2023

In the first quarter of 2023 the share of non-resident applications for trademarks under the national procedure amounted to 20.3%, which is the highest indicator in the last 5 years (figure 13).

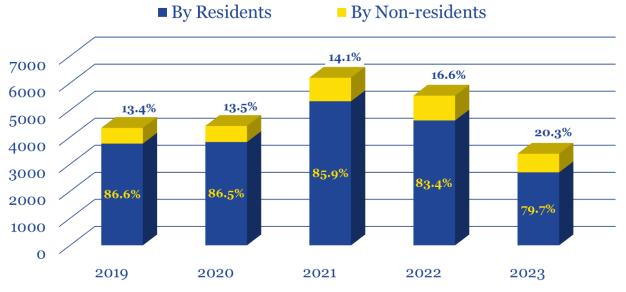


Figure 13. Trend in Trademark Registrations (under the National Procedure) in the First Quarter from 2019 to 2023

6. Copyright

During the first quarter of 2023, 2,180 applications for copyright were filed, which is one of the best indicators in the last 5 years. Compared to the corresponding period of the previous year, the number of applications increased by almost 40.8%, and the number of contracts relating to the copyright in a work increased by more than 91.5% (table 12, figure 14).

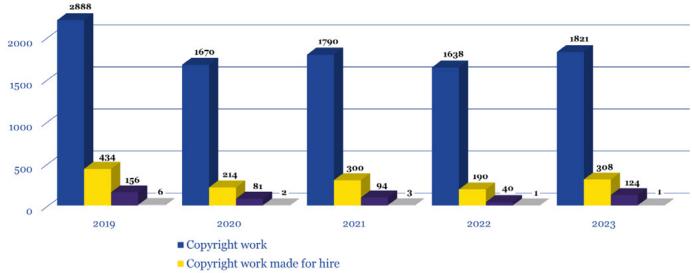
Table 12. Applications for Registration of Copyright and Contracts Relating to the Author'sRight in a Work in the First Quarter from 2019 to 20231

	2019	2020	2021	2022	2023 ²	2023 to 2022
Copyright in a work	2,067	1,503	1,746	1,445	1,966	136.1%
Copyright in a work made for hire	260	168	239	103	214	207.8%
Contracts on the transfer (alienation) of property rights in a work	101	76	103	47	90	191.5%
Contracts transfer of the right to use a work	9	3	_	_	3	_
	76_3	239 103 2021	1445	47_0	214 90	
■ Copyright w	ork				1015	
	ork made for hi	ire				
Contracts or	n the transfer (a	lienation) of pro	operty rights in	a work		
Contracts tr	ansfer of the rig	ght to use a work	c			

Figure 14. Trend in Applications for Registration of Copyright and Contracts Relating to the Author's Right in a Work in the First Quarter from 2019 to 2023 The registration indicators for copyright and contracts relating to the author's right in a work show a similar trend to the filed applications in the first quarter of 2023. In total, over 2.1 state registrations for copyright in works were made, which is the best indicator since 2020. Meanwhile 125 contracts relating to the copyright in a work were registered, tripled comparing to the corresponding period of the last year (table 13, figure 15).

Table 13. Registrations of Copyright and Contracts Relating to the Author's Right in a Workin the First Quarter from 2019 to 2023

	2019	2020	2021	2022	2023	2023 to 2022
Copyright in a work	2,888	1,670	1,790	1,638	1,821	111.2%
Copyright in a work made for hire	434	214	300	190	308	162.1%
Contracts on the transfer (alienation) of property rights in a work	156	81	94	40	124	310.0%
Contracts transfer of the right to use a work	6	2	3	1	1	_



Contracts on the transfer (alienation) of property rights in a work

Contracts transfer of the right to use a work



Distribution of the state registrations of copyright in a work by subject matter is presented in the figure 16.

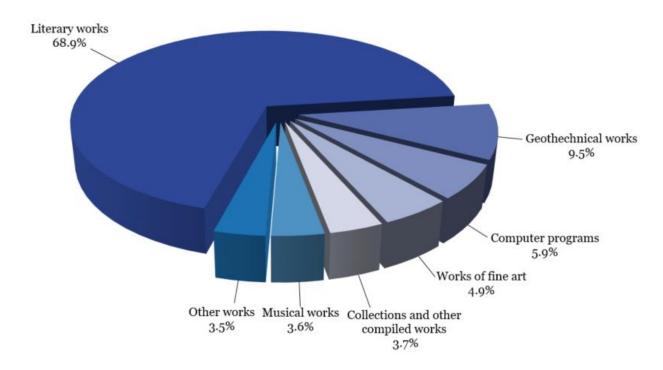


Figure 16. Distribution of the State Registrations of Copyright in a Work by Subject Matter in the First Quarter of 2023

II. Analysis of Inventive Activity of National Applicants

1. Applications for Inventions and Utility Models

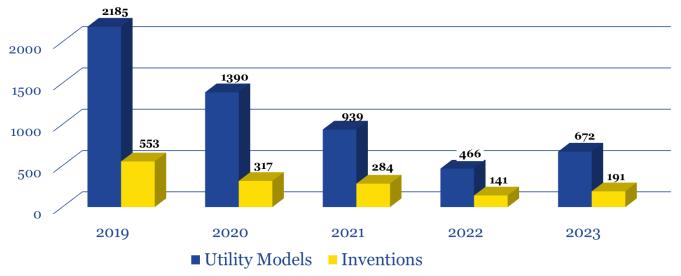
The inventive activity of resident applicants is still at a relatively low level since the start of the full-scale invasion by the russian federation. However, compared to the previous year, the number of applications for inventions and utility models from national applicants in the first quarter of 2023 increased by 42.2% (table 14, figure 17).

Table 14. Inventions and Utility Models Applications by Residents in the First Quarter from2019 to 20231

	2019	2020	2021	2022	2023 ²	2023 to 2022
Total	2,738	1,707	1,223	607	863	142.2%
Inventions, including	553	317	284	141	191	135.5%
legal entities	319	136	149	81	101	124.7%
individuals	234	181	135	60	90	150.0%
Utility models, including	2,185	1,390	939	466	672	144.2%
legal entities	1,461	886	548	271	421	155.4%
individuals	724	504	391	195	251	128.7%

Distribution of applications for inventions and utility models from resident legal entities in the first quarter from 2019 to 2023 categorized by economic activities and by government authorities is presented in annexes 3, 4, 5.

Higher educational institutions and scientific organizations with the highest inventive activity are presented in annexes 6, 7.





The most active applicants among higher educational institutions under the Ministry of Education and Science of Ukraine in the first quarter of 2023 were the following applicants (figure 18):

- Kryvyi Rih National University 34 applications
- National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute" – 22 applications
- Lviv Polytechnic National University 21 applications
- Kharkiv National Automobile And Highway University 14 applications
- Lutsk National Technical University 13 applications
- Higher Educational Institution "Podillia State University" 12 applications
- Vinnytsia National Technical University 11 applications
- Ivan Franko National University of Lviv 10 applications
- Volodymyr Dahl East Ukrainian National University 9 applications
- Ukrainian State University of Railway Transport 9 applications
- Poltava State Agrarian Academy 9 applications

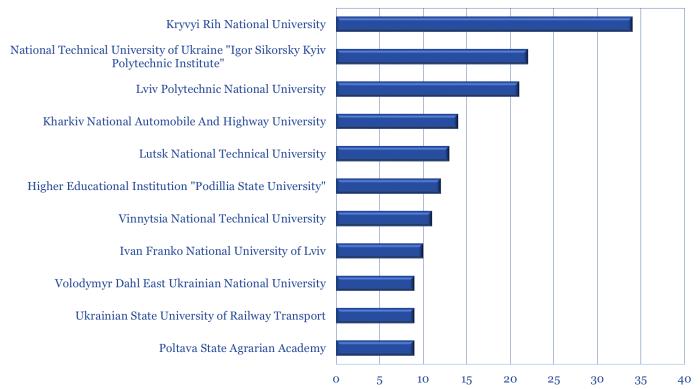


Figure 18. Higher Educational Institutions under the Ministry of Education and Science of Ukraine with the Highest Inventive Activity in the First Quarter of 2023

Among institutions of the National Academy of Sciences (NAS) of Ukraine with the highest inventive activity were (figure 19):

- Institute of Engineering Thermophysics 7 applications
- L.V.Pisarzhevskii Institute of Physical Chemistry 6 applications
- Institute of Pulse Processes and Technologies 4 applications
- Institute of Macromolecular Chemistry 3 applications
- V.E. Lashkaryov Institute of Semiconductor Physics 3 applications
- M.S. Poliakov Institute of Geotechnical Mechanics 3 applications
- Institute for Problems in Materials Science of I.M.Fratsevich 2 applications
- E.O. Paton Electric Welding Institute 2 applications
- General Energy Institute 2 applications
- A.V. Bogatsky Physico-Chemical Institute 2 applications
- Institute of Hydromechanics of NAS of Ukraine 2 applications
- Institute for Safety Problems of Nuclear Power Plants of NAS of Ukraine 2 applications
- The Institute of Renewable Energy of NAS of Ukraine 2 applications

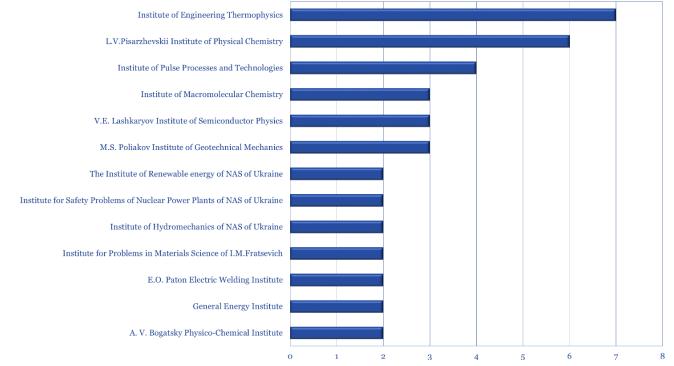


Figure 19. Institutions of National Academy of Sciences of Ukraine with the Highest Inventive Activity in the First Quarter of 2023

The leader in applications for inventions and utility models under the national procedure remains Kyiv with 240 applications (27.8% of the total number of resident applicants). The leading regions on the list are: Kharkiv – 121 applications (14.0%), Dnipropetrovsk – 102 applications (11.8%), Lviv – 62 applications (7.2%), Kyiv – 39 applications (4.5%), Vinnytsia – 33 applications (3.8%), Odesa – 31 applications (3.5%), Poltava – 27 applications (3.1%) and Mykolayiv – 23 applications (2.7%) regions (figure 20, annex 8).

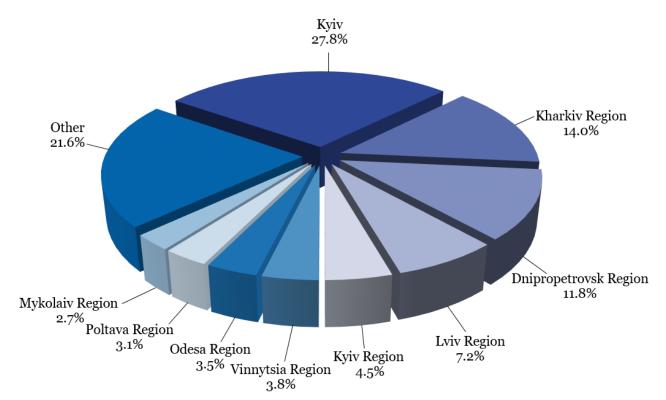


Figure 20. Applications for Inventions and Utility Models by Regions of Ukraine in the First Quarter 2023

2. Registration of Inventions and Utility Models

Indicators of inventions and utility models registrations slightly decreased in the first quarter of 2023, unlike the number of applications. The total number of registrations from resident applicants is 649, decreased by 16.9% compared to the corresponding period of the previous year (table 15, figure 21).

Table 15.Inventions and Utility Models Registrations by Residents in the First Quarterfrom 2019 to 2023

	2019	2020	2021	2022	2023	2023 to 2022
Total	2,693	2,163	1,499	781	649	83.1%
Inventions, including	336	248	316	178	136	76.4%
legal entities	216	159	204	112	96	85.7%
individuals	120	89	112	66	40	60.6%
Utility models, including	2,357	1,915	1,183	603	513	85.1%
legal entities	1,617	1,269	744	363	386	106.3%
individuals	740	646	439	240	127	52.9%

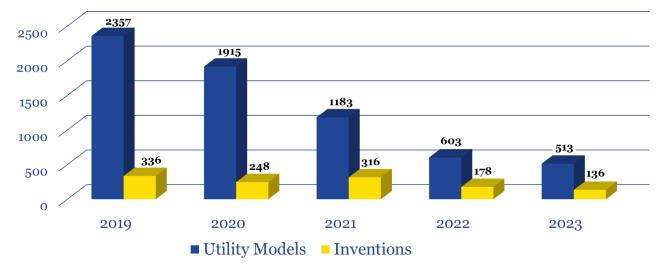


Figure 21. Trend in Inventions and Utility Models Registrations by Residents in the First Quarter from 2019 to 2023

III. Business Activity Analysis

The number of registered trademarks worldwide exceeds 70 million. The growth rate of this indicator is significant, with approximately 6-8 million registered trademarks per year. The value of well-known brands serves as the best evidence of the importance of trademark registration.

The UANIPIO provides businesses and other users with information about trademarks that have legal protection in Ukraine. Electronic filing of trademarks allows brand owners to submit applications online. Trademark registration allows the business to increase its recognition and promote its competitiveness of goods and services not only in the Ukrainian market but also in other countries.

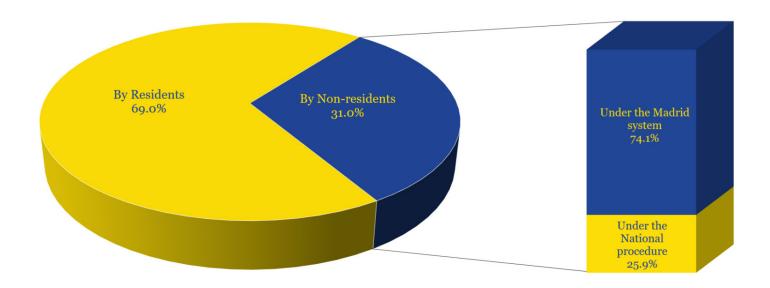
1. Resident and Non-Resident Applicants with the Highest Number of Filed Applications for Trademarks

In the first quarter of 2023, the share of resident applications for trademarks under the national procedure increased by 16.2% and amounted to 69.0% of the total number of applications, the share of applications from non-resident applicants was 31.0% (table 16).

The number of non-resident applicants filing applications under the Madrid system decreased by 30.7% compared to the first quarter of the previous year, and it accounted to 74.1% (figure 22).

	2019	2020	2021	2022	2023 ²	2023 to 2022
Total	9,682	8,454	9,454	6,579	6,304	95.8 %
By residents						
Under the national procedure	6,506	5,435	6,532	3,745	4,350	116.2%
By non-residents	3,176	3,019	2,922	2,834	1,954	68.9%
Under the national procedure Under the Madrid system	821 2,355	967 2,052	1,047 1,875	747 2,087	507 1,447	67.9% 69.3%

Table 16. Applications for Trademarks in the First Quarter from 2019 to 2023¹





2. Business Priorities in the Goods and Services Sector

In the first quarter of 2023, the largest number of applications for trademarks under the national procedure was filed under the 35-th Class of the Nice Classification (1,693 applications), which primarily includes services related to business management, operation, organization, and administration of trade or industrial enterprises, as well as advertising, marketing, and sales promotion services (table 17).

Table 17. Distribution Priorities of Applications for Trademarks by NCL Classes under theNational Procedure in the First Quarter of 2023

NCL Class	Class Heading	qty	By Residents	By non- residents
35	Advertising; business management, organization and administration; office functions.	1,693	1,620	73
41	Education; providing of training; entertainment; sporting and cultural activities.	646	601	45
5	Pharmaceuticals, medical and veterinary preparations; sanitary preparations for medical purposes; dietetic food and substances	474	311	163
43	Services for providing food and drink; temporary accommodation.	384	374	10
30	Coffee, tea, cocoa and substitutes therefor; rice, pasta and noodles; tapioca and sago; flour and preparations made from cereals	382	353	29
9	Scientific, research, navigation, surveying, photographic, cinematographic, audiovisual, optical, weighing, measuring, signalling, detecting, testing, inspecting, life-saving and teaching apparatus and instruments	381	306	75
42	Scientific and technological services, research and design relating thereto	353	321	32
25	Clothing, footwear, headwear.	318	305	13
44	Medical services; veterinary services; hygienic and beauty care for human beings or animals; agriculture, aquaculture, horticulture and forestry services.	301	290	11
36	Financial, monetary and banking services; insurance services; real estate services.	256	234	22

Among the national companies with the highest number of filed applications for

trademarks in the first quarter of 2023, there are (figure 23):

- Limited Liability Company "Delta Medical" (Kyiv region);
- KIDDISVIT LLC (Dnipropetrovsk region);
- Limited Liability Company SPACEIKS (Kyiv);
- Joint Stock Company FARMAK (Kyiv);
- LIUKS PRODAKSHN LLC (Lviv region);
- PARIMATCH Limited Liability Company (Kyiv);
- NATURPRODUKT VEHA LLC (Ternopil region);
- UKRTRIMEKS LLC (Kyiv);
- Limited Liability Company BAUM PHARM GMBH REPRESENTATIVE OFFICE (Lviv region);
- Private Joint-Stock Company OBOLON (Kyiv).

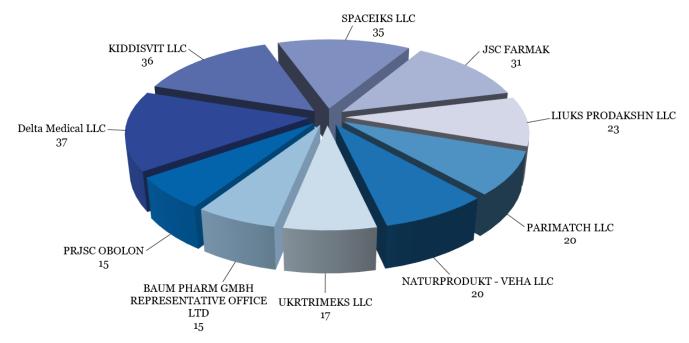


Figure 23. National Companies with the Highest Number of Filed Applications for Trademarks in the First Quarter of 2023

The leading foreign companies in terms of the number of applications for trademarks are (figure 24):

- Philip Morris Products S.A. (Cyprus);
- GSH Trademarks Limited (Cyprus);
- British American Tobacco (Brands) Inc. (United States of America);
- Nicoventures Holdings Limited (United Kingdom);
- British American Tobacco (Brands) Limited (United Kingdom);
- KT & G Corporation (Republic of Korea);
- Astellas Pharma Inc. (Japan);
- Diavena OOD (Bulgaria).

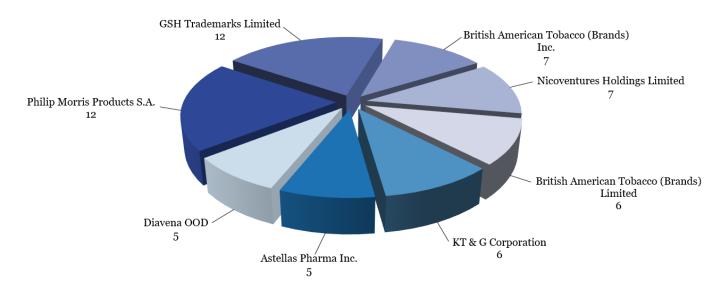


Figure 24. The Most Active Foreign Companies in the First Quarter of 2023

Distribution of Resident Applications for Inventions by Technology Fields in the First Quarter from 2019 to 2023

	2019	2020	2021	2022	2023
Total	553	317	28 4	141	191
Elec	trical engineer	ring			
Electrical machinery, apparatus, energy	22	13	10	6	22
Audio-visual technology	3	2	1	1	3
Telecommunications	7	6	5	_	7
Digital communication	2	2	1	_	2
Basic communication processes	1	5	5	2	1
Computer technology	7	5	4	4	7
IT methods for management	1	2	_	1	1
Semiconductors	1	2	1	1	1
	Instruments				
Optics	4	_	2	1	_
Measurement	43	19	14	10	6
Analysis of biological materials	18	4	3	1	_
Control	11	9	6	1	2
Medical technology	42	26	16	7	5
	Chemistry				
Organic fine chemistry	13	2	9	7	2
Biotechnology	2	3	3	1	1
Pharmaceuticals	42	20	19	7	5
Macromolecular chemistry, polymers	8	2	1	3	0
Food chemistry	23	10	14	3	1
Basic materials chemistry	12	8	7	2	3
Materials, metallurgy	18	16	18	16	7
Surface technology, coating	18	6	9	2	_
Micro-structural and nano-technology	4	2	3	2	2
Chemical engineering	25	20	10	5	2
Environmental technology	7	5	7	4	4
	anical engine				
Handling	12	11	11	4	1
Machine tools	21	9	8	8	2
Engines, pumps, turbines	38	24	12	5	4
Textile and paper machines	5	-	2		2
Other special machines	29	19	18	16	8
Thermal processes and apparatus	14	11	3	1	2
Mechanical elements	18	9	5	2	2
Transport	26	10	14	3	3
	Other fields				
⁻ urniture, games	7	8	5	3	4
Other consumer goods	6	3	2	1	1
Civil engineering	23	9	20	7	5
Unknown	20	15	16	3	101

Distribution of Non-resident Applications for Inventions by Technology Fields in the First Quarter from 2019 to 2023

	2019	2020	2021	2022	2023
Total	399	386	440	440	480
Elect	rical enginee	ring			
Electrical machinery, apparatus, energy	8	7	5	8	7
Audio-visual technology	2	1	6	8	_
Telecommunications	1	1	1	1	_
Digital communication	1	6	2	8	1
Basic communication processes	4	10	6	5	8
Computer technology	2	5	5	5	3
	Instruments				
Optics	1	_	_	1	_
Measurement	9	3	5	5	9
Analysis of biological materials	2	3	3	3	9
Control	4	1	2	3	3
Medical technology	11	7	5	9	8
	Chemistry				
Organic fine chemistry	37	42	38	53	39
Biotechnology	42	28	47	47	35
Pharmaceuticals	73	79	109	91	78
Macromolecular chemistry, polymers	4	4	3	4	4
Food chemistry	21	16	9	17	9
Basic materials chemistry	32	30	32	34	33
Materials, metallurgy	20	18	13	20	25
Surface technology, coating	9	11	8	4	5
Micro-structural and nano-technology	—	—	—	1	-
Chemical engineering	8	10	7	11	13
Environmental technology	2	4	5	2	4
Mecha	unical engine	ering			
Handling	13	7	6	5	10
Machine tools	5	8	4	4	2
Engines, pumps, turbines	5	9	7	9	5
Textile and paper machines	3	3	3	2	5
Other special machines	26	20	22	21	16
Thermal processes and apparatus	4	6	5	5	3
Mechanical elements	6	9	6	9	3
Transport	5	7	6	4	8
	Other fields			•	
Furniture, games	7	4	6	1	4
Other consumer goods	23	17	46	26	83
Civil engineering	7	8	16	12	12
Unknown	2	2	2	2	36

Annex 3 Distribution of Resident Applications for Inventions from Legal Entities by Economic Activities in the First Quarter from 2019 to 2023

	2019	2020	2021	2022	2023
Total	319	136	149	81	101
Agriculture, forestry and fishing	3	_	_	_	_
Mining and quarrying	-	_	-	-	_
Manufacturing, including	8	6	6	4	1
Manufacture of food products, beverages and tobacco	_	_	1	_	_
Manufacture of textiles and textile products, leather and leather products	_	_	_	_	_
Manufacture of wood and wood products, paper and paper	_	_	_	1	
products; publishing and printing					
Manufacture of coke and refined petroleum products	_	_	_	_	_
Manufacture of chemicals and chemical products	_	-	2	1	_
Manufacture of basic pharmaceutical products and pharmaceutical preparations	2	1	-	-	-
Manufacture of rubber and plastic products	2	_	_	_	_
Manufacture of fabricated metal products, except machinery and equipment	1	_	_	1	_
Manufacture of computer, electronic and optical products	_	2	_	_	_
Manufacture of electrical equipment	2	2	_	_	_
Manufacture of machinery and equipment n.e.c.	1	_	3	1	_
Manufacture of motor vehicles, trailers and semi-trailers and other transport equipment	_	1	_	_	_
Manufacture of furniture, Other manufacturing, Repair and					
installation of machinery and equipment	_	-	-	-	1
Electricity, gas, steam and air conditioning supply					
	_	_	_	_	_
Water supply; sewerage, waste management and remediation activities	_	_	_	_	—
Construction	-	1	1	-	_
Wholesale and retail trade; repair of motor vehicles and motorcycles	1	-	1	-	2
Fransportation and storage	-	_	_	_	_
Information and communication	1	_	1	_	_
Financial and insurance activities	_	_	_	_	_
Real estate activities	_	_	_	_	
Professional, scientific and technical activities	86	30	51	27	32
Scientific research and development	79	22	45	27	30
Administrative and support service activities	_	_	_	_	
Education	216	97	88	43	53
Human health and social work activities	1	2	1	-	-
Other	3	_	_	7	13

Annex 4

Distribution of Resident Applications for Utility Models from Legal Entities by Economic Activities in the First Quarter from 2019 to 2023

	2019	2020	202 1	2022	2023
Total	1,461	886	548	271	421
Agriculture, forestry and fishing	2	6	3		1
Mining and quarrying	5	1	4	3	3
Manufacturing, including	48	37	31	14	7
Manufacture of food products, beverages and tobacco	2	2	_	_	1
Manufacture of textiles and textile products, leather and leather products	_	_	1	_	_
Manufacture of wood and wood products, paper and paper products; publishing and printing	3	4	—	1	_
Manufacture of coke and refined petroleum products	-	_	—	_	_
Manufacture of chemicals and chemical products	_	_	_	_	_
Manufacture of basic pharmaceutical products and pharmaceutical preparations	1	_	1	1	_
Manufacture of rubber and plastic products	3	_	3	1	2
Manufacture of fabricated metal products, except machinery and equipment	7	3	2	1	1
Manufacture of computer, electronic and optical products	1	1	2	_	_
Manufacture of electrical equipment	_	3	2	3	1
Manufacture of machinery and equipment n.e.c.	25	16	10	5	1
Manufacture of motor vehicles, trailers and semi-trailers and other transport equipment	5	7	5	2	_
Manufacture of furniture, Other manufacturing, Repair and installation of machinery and equipment	1	1	5	_	1
Electricity, gas, steam and air conditioning supply	_	_	_	_	_
Water supply; sewerage, waste management and remediation activities	_	_	_	_	1
Construction	4	1	1	_	_
Wholesale and retail trade; repair of motor vehicles and notorcycles	8	8	8	3	1
Transportation and storage	3	1	-	—	1
Information and communication	7	1	4	—	_
Financial and insurance activities	1	_	-	—	_
Real estate activities	-	1	2	—	_
Professional, scientific and technical activities	198	126	93	50	72
Scientific research and development	189	117	86	49	71
Administrative and support service activities	1	4	_	_	2
Education	1,154	666	39 7	186	288
Human health and social work activities	24	28	3	_	2
Other	6	6	2	15	43

Annex 5 Distribution of Resident Applications for Inventions and Utility Models from Legal Entities by Government Agencies in the First Quarter from 2019 to 2023

	2019	2020	2021	2022	2023
Total	1,780	1,022	697	352	522
Ministry of Education and Science of Ukraine	953	427	394	204	285
The National Academy of Sciences of Ukraine	132	63	79	52	60
Ministry of Defence of Ukraine	22	6	8	4	32
The National Academy of Agrarian Sciences (NAAS) of Ukraine	48	30	30	12	20
Ministry of Health of Ukraine	378	308	64	18	12
State Emergency Service of Ukraine	26	10	23	6	9
State Reserve Agency of Ukraine	_	—	_	—	7
Ministry of Internal Affairs of Ukraine	1	3	4	1	5
Ministry of Economy of Ukraine	8	2	1	—	4
National Academy of Medical Sciences of Ukraine	65	46	6	3	4
Government of Ukraine	13	11	3	2	3
The Ukroboronprom State Concern	5	3	4	1	2
Other Government Agencies	129	113	81	49	79

Annex 6

Higher Educational Institutions of Ukraine with the Highest Inventive Activity Based on Applications for Inventions and Utility Models in the First Quarter from 2019 to 2023

	2019	2020	2021	2022	2023
Total	1,370	763	485	229	341
Kryvyi Rih National University	13	1	13	16	34
National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"	69	11	9	3	22
Lviv Polytechnic National University	18	19	16	4	21
Ivan Kozhedub National Air Force University	8	4	5	2	21
Kharkiv National Automobile and Highway University	16	3	5	3	14
Lutsk National Technical University	6	2	8	5	13
Higher Educational Institution "Podillia State University"	11	_	5	_	12
Vinnytsia National Technical University	25	8	13	17	11
Ivan Franko National University of Lviv	7	1	2	1	10
The National Defence University of Ukraine named after Ivan Cherniakhovskyi	8	_	2	1	10
Poltava State Agrarian University	10	6	20	13	9
Ukrainian State University of Railway Transport	2	_	12	2	9
Volodymyr Dahl East Ukrainian National University	8	7	5	2	9
National University of Food Technologies	74	31	13	3	8
National Technical University – "Kharkiv Polytechnic Institute"	43	16	18	3	8
Petro Mohyla Black Sea National University	7	1	_	2	8
Dnipro University of Technology	5	4	13	4	7
The National University of Water and Environmental Engineering	17	10	7	6	7
National University of Civil Protection of Ukraine	24	8	18	6	7
Uman National University of Horticulture	13	4	16	_	6
National University of Life and Environmental Sciences Of Ukraine	38	11	6	1	5
Mykolayiv State Agrarian University	21	2	2	_	5
Ukrainian State University of Chemical Technology	3	2	_	6	5
Central Ukrainian National Technical University	11	9	5	2	5
Other	913	603	272	12 7	75

Annex 7 Scientific Organizations of Ukraine with the Highest Inventive Activity Based on Applications for Inventions and Utility Models in the First Quarter from 2019 to 2023

	2019	2020	2021	2022	202
Total	268	139	131	76	101
The Ukranian State Scientific Research Institute "Resurs"	_	_	_	_	7
Institute of Engineering Thermophysics of NAS of Ukraine	4	_	1	_	7
L.V.Pisarzhevskii Institute of Physical Chemistry of NAS of	_	3	7	8	6
Ukraine			1	0	
Institute of Pulse Processes and Technologies of NAS of Ukraine	1	1	_	_	4
Institute of Thermoelectricity under NAS and MES of Ukraine	10	1	2	5	4
Ukrainian Institute for Plant Variety Examination	_	—	_	-	4
M.S. Poliakov Institute of Geotechnical Mechanics of NAS of Ukraine	13	5	14	6	3
Physical-Chemical Institute for Environmental and Human Protection under NAS and MES of Ukraine	5	-	3	5	3
V.E. Lashkaryov Institute of Semiconductor Physics of NAS of Ukraine	7	2	3	1	3
Institute of Pig Breeding and Agricultural Production of the NAAS of Ukraine	3	2	3	4	3
Institute of Macromolecular Chemistry of NAS of Ukraine	7	1	2	4	3
State Institution "National Research Center for Radiation Medicine of National Academy of Medical Sciences of Ukraine"	2	1	1	_	2
E.O. Paton Electric Welding Institute of NAS of Ukraine	9	5	4	5	2
State Research Production Enterprise Of Chemical Products	_	_	_	_	2
Institute for Safety Problems of Nuclear Power Plants of NAS of Ukraine	_	_	_	1	2
The Institute of Renewable Energy of NAS of Ukraine	2	_	2	_	2
The National Scientific Center "Institute of Agriculture NAAS"	_	_	1	1	2
Institute for Problems in Materials Science of I.M.Fratsevich of NAS of Ukraine	2	2	_	_	2
General Energy Institute of NAS of Ukraine	_	_	_	_	2
Institute of Veterinary Medicine of the NAAS	_	_	1	_	2
National Scientific Center "Institute of Experimental and Clinical Veterinary Medicine"	10	8	4	1	2
Joint-Stock Company "Scientific and Technological Complex ELECTROPRYLAD' "	_	_	_	1	2
A. V. Bogatsky Physico-Chemical Institute of NAS of Ukraine	2	1	1	_	2
The Institute of Vegetable and Melon Growing of the National Academy of Agrarian Sciences of Ukraine	_	_	_	1	2
Institute for Agriculture of Polissia of NAAS of Ukraine	_	_	_	_	2
Institute of Irrigated Agriculture of NAAS of Ukraine	1	1	_	2	2
Institute of Hydromechanics of NAS of Ukraine	2	_	_	1	2
Other	188	106	82	30	22

Resident Applications for Inventions and Utility Models by Region of Ukraine in the First Quarter from 2019 to 2023

		Util	ity Mo	dels			In	ventio	ns	
	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
Total	2,185	1,390	939	466	672	553	317	28 4	141	191
The Autonomous Republic of Crimea	2	3	-	—	_	1	1	-	_	_
Vinnytsia	59	29	23	22	26	9	16	8	5	7
Volyn	13	12	20	4	20	1	_	2	1	_
Dnipropetrovsk	195	126	111	51	86	54	39	37	24	16
Donetsk	82	58	31	6	9	24	10	7	2	2
Zhytomyr	39	14	10	7	3	6	4	_	2	3
Zakarpattia	22	10	13	6	4	16	2	9	3	4
Zaporizhzhia	70	37	18	3	11	10	12	10	8	5
Ivano-Frankivsk	35	25	17	13	12	9	15	9	5	4
Kyiv Region	34	31	25	19	30	15	9	17	8	9
Kirovohrad	14	12	8	4	6	7	4	2	_	1
Luhansk	46	20	12	4	9	4	4	1	_	1
Lviv	92	62	42	20	45	27	9	16	3	17
Mykolayiv	47	13	7	4	19	9	5	3	_	4
Odesa	114	62	54	27	23	45	27	18	11	8
Poltava	52	44	49	25	25	8	3	7	_	2
Rivne	35	14	12	7	9	5	_	_	1	1
Sumy	16	18	14	7	12	6	3	8	3	5
Ternopil	145	182	24	11	8	4	7	2	_	2
Kharkiv	380	172	148	68	98	92	38	34	15	23
Kherson	35	34	15	19	4	7	4	4	1	1
Khmelnytskyi	26	20	22	8	20	5	3	1	_	1
Cherkasy	31	19	23	7	14	7	7	_	3	2
Chernivtsi	82	34	23	14	7	-	_	2	_	_
Chernihiv	14	4	4	3	4	7	3	1	1	1
Kyiv	505	335	214	106	168	175	92	86	45	72
Unknown	_	_	_	1	_	_	_	_	_	_

Annex 9

Non-resident Applications for Trademarks under the National Procedure by Origin in the First Quarter from 2019 to 2023

	2019	2020	2021	2022	2023
Total	821	969	1,047	747	507
United States of America	179	227	197	134	100
United Kingdom	39	27	43	17	55
Cyprus	112	118	92	73	52
Switzerland	59	94	145	102	47
Germany	27	62	31	60	32
Poland	21	19	25	18	28
China	46	39	52	48	26
Hong Kong, China	6	27	5	4	19
Japan	23	36	24	19	15
India	24	28	50	14	12
Lithuania	9	5	10	3	10
Austria	4	8	12	8	9
British Virgin Islands	2	4	1	21	8
Republic of Korea	26	35	17	25	7
France	18	20	25	11	7
Other	226	220	318	190	80