

INTELLECTUAL PROPERTY IN FIGURES

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

2023



State Organization
“Ukrainian National Office for Intellectual Property and
Innovations”

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first half of 2023

Kyiv – 2023

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I. Main Performance Indicators

1. Common Tendencies

In times, when Ukraine has been resisting Russian Federation's military aggression for more than a whole year, Ukrainian economy demonstrated striking endurance giving the field of intellectual property an opportunity to recover and develop.

In the first half of 2023, there was a considerable increase in activity in the field of intellectual property showing a gradual returning of indicators in the field of intellectual property to the pre-war levels. More than 15 thousand applications for industrial property rights were filed during the first 6 months of 2023. Comparing the first halves of 2022 and 2023, the total number of filed applications increased by 51.2%: for inventions – by 16.2%, for utility models – by 70.5%, for industrial designs – by 29.7%, for national trademark applications – by 55.5% (table 1, figure 1).

Table 1. Applications for Industrial Property Rights Protection in the First Half of the Year from 2019 to 2023¹

	2019	2020	2021	2022	2023 ²	2023 to 2022
Total	24,414	17,573	20,291	10,064	15,213	151.2%
Inventions	2,021	1,453	1,592	1,223	1,421	116.2%
Utility Models	5,166	2,482	2,148	1,038	1,770	170.5%
Industrial designs	1,412	991	881	437	567	129.7%
Trademarks (under the national procedure)	15,815	12,647	15,670	7,366	11,455	155.5%

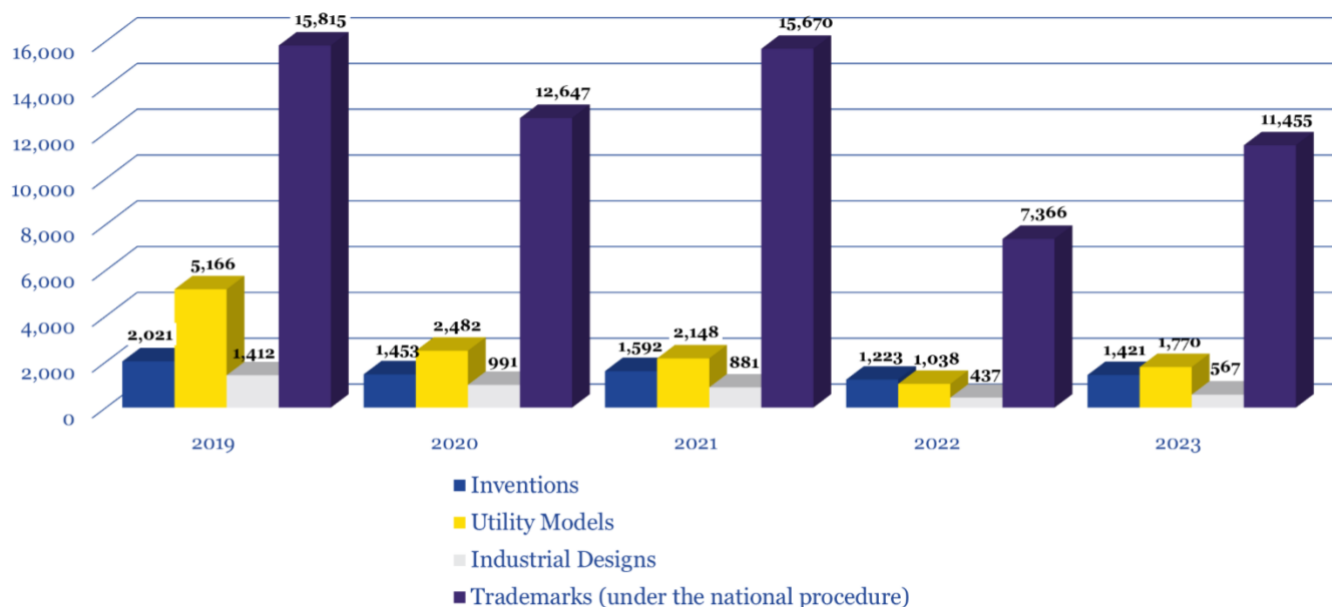


Figure 1. Trend in Applications for Industrial Property Rights Protection in the First Half of the Year from 2019 to 2023

¹ Data for previous years have been updated

² Previous data

More than 9.3 thousand protection titles were granted in the first half of 2023. The total number of granted protection titles compared to the same period of the previous year decreased by 25.1%: for inventions – by 23.1%, for industrial designs – by 39.4%, for national trademark applications (under the national procedure) – by 27.8%, while the number of protection titles granted for utility models increased by 2.3% (table 2, figure 2).

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

	2019	2020	2021	2022	2023	2023 to 2022
Total	15,886	14,053	16,668	12,534	9,394	74.9%
Inventions	1,198	1,061	1,221	835	642	76.9%
Utility Models	4,513	3,516	2,355	1,198	1,225	102.3%
Industrial designs	1,269	915	1,066	454	275	60.6%
Trademarks (under the national procedure)	8,906	8,561	12,026	10,047	7,252	72.2%

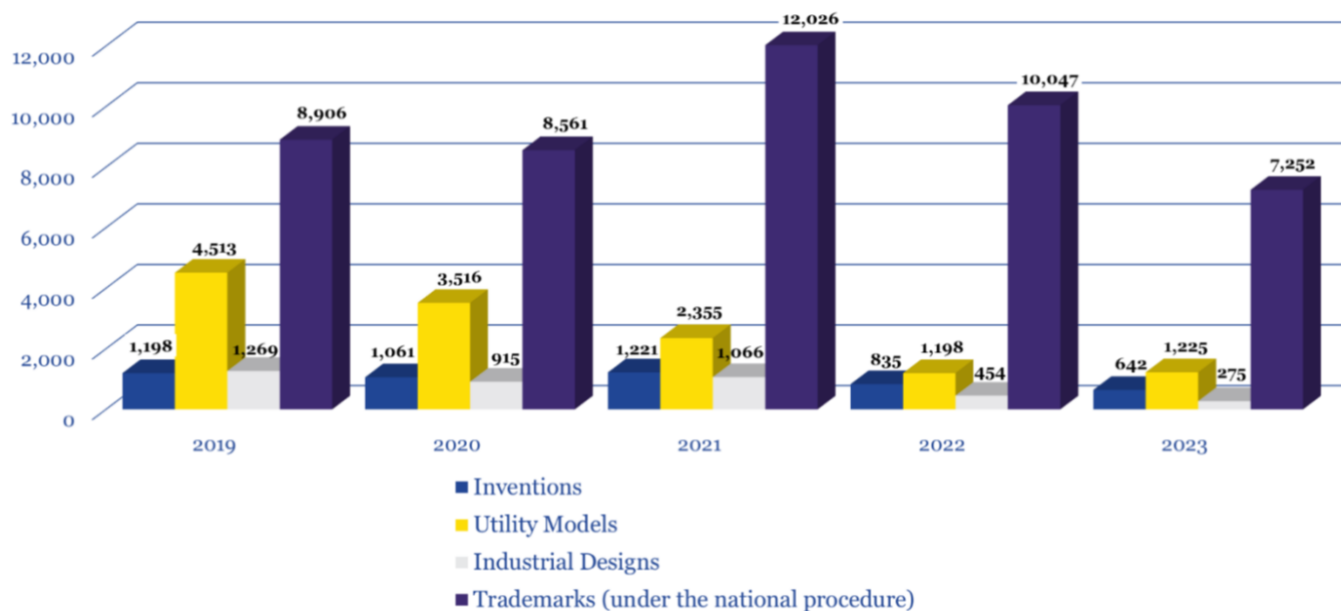


Figure 2. Trend in Industrial Property Rights Protection Registrations in the First Half of the Year from 2019 to 2023

2. Inventions

Comparing with the corresponding period of the previous year, there was an increase in activity of resident applicants by 63% and an increase in activity of non-resident applicants by 1%. The overall number of applications for inventions in the first half of 2023 almost approached the pre-war levels. In the first half 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).

Table 3. Patents Filed in the First Half of the Year from 2019 to 2023¹

	2019	2020	2021	2022	2023 ²	2023 to 2022
Total	2,021	1,453	1,592	1,223	1,421	116.2%
Under the national procedure	1,284	744	718	415	568	136.9%
Resident applicants	1,193	614	587	301	488	162.1%
Non-resident applicants	91	130	131	114	80	70.2%
Under the PCT procedure including resident applicants	737	709	874	808	853	105.6%
Resident applicants	–	1	3	–	4	–

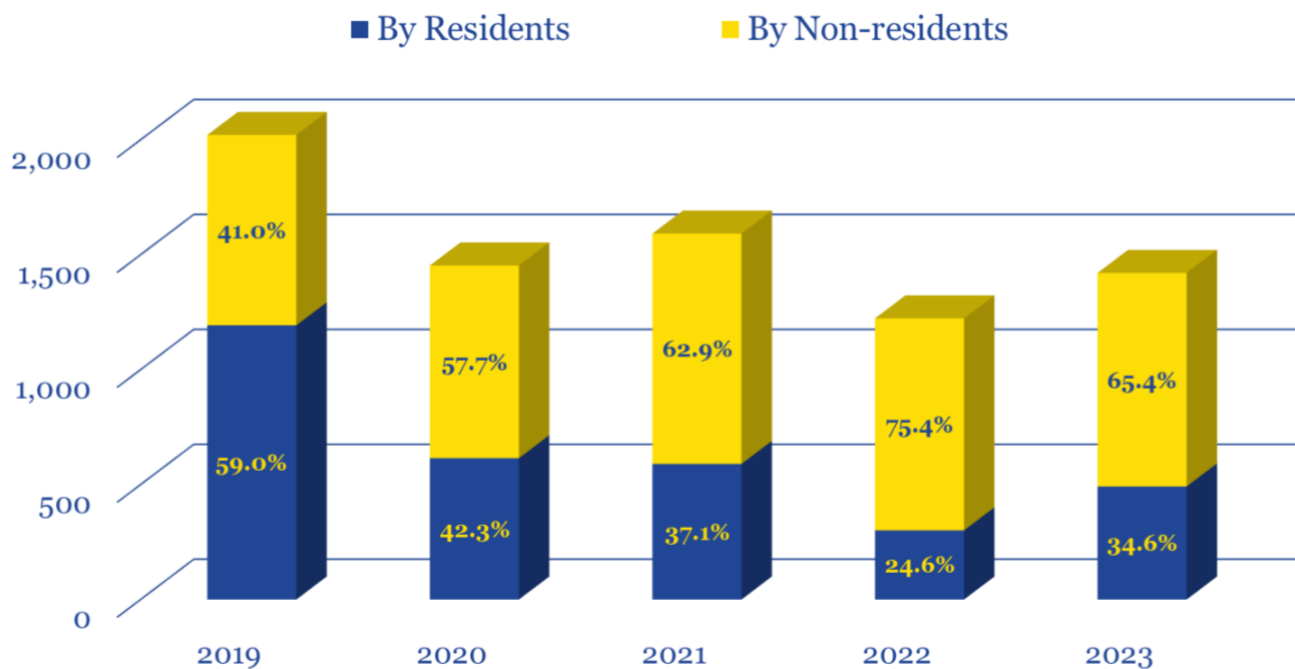


Figure 3. Trend in Patents Filed in the First Half of the Year from 2019 to 2023

The share of non-resident applicants who filed applications under the PCT procedure increased by 5.1%, comparing with the indicators of the previous year, and amounted to 91.4% (figure 4).

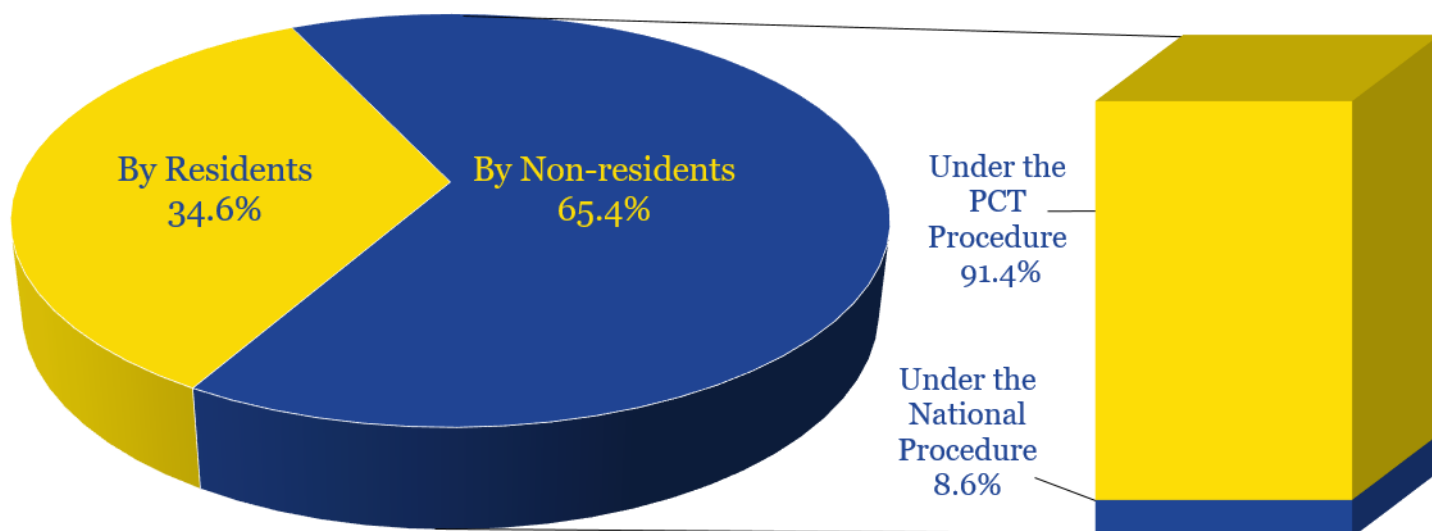


Figure 4. Correlation between Resident and Non-resident Applicants in the First Half of the Year of 2023

As in the previous year, in the first half of 2023 leaders among non-resident applicants remained the United States of America (-9.0% compared to the previous year), Switzerland (+20.2%), United Kingdom (+22.8%) and Germany (+10.4%). It is worth mentioning that the number of applications from the Luxembourg (+40.7%), Republic of Korea (+100%), Sweden (+100%) and Netherlands (+91.7%) increased significantly, at the same time the number of applications from China (-45.5%) decreased essentially (table 4, figure 5).

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

	2019	2020	2021	2022	2023²	2023 to 2022
Total	828	838	1,002	922	929	100.8%
United States of America	247	218	296	266	242	91.0%
Switzerland	89	91	110	109	131	120.2%
United Kingdom	36	53	64	92	113	122.8%
Germany	105	100	112	96	106	110.4%
Luxembourg	14	39	26	27	38	140.7%
France	37	22	31	32	33	103.1%
Republic of Korea	13	12	26	15	30	200.0%
China	22	45	67	44	24	54.5%
Netherlands	19	20	18	12	23	191.7%
Sweden	14	10	12	11	22	200.0%
Japan	27	25	32	27	20	74.1%
Italy	11	30	15	13	18	138.5%
India	15	12	12	15	17	113.3%
Belgium	27	12	22	24	16	66.7%
Other	152	149	159	139	96	69.1%

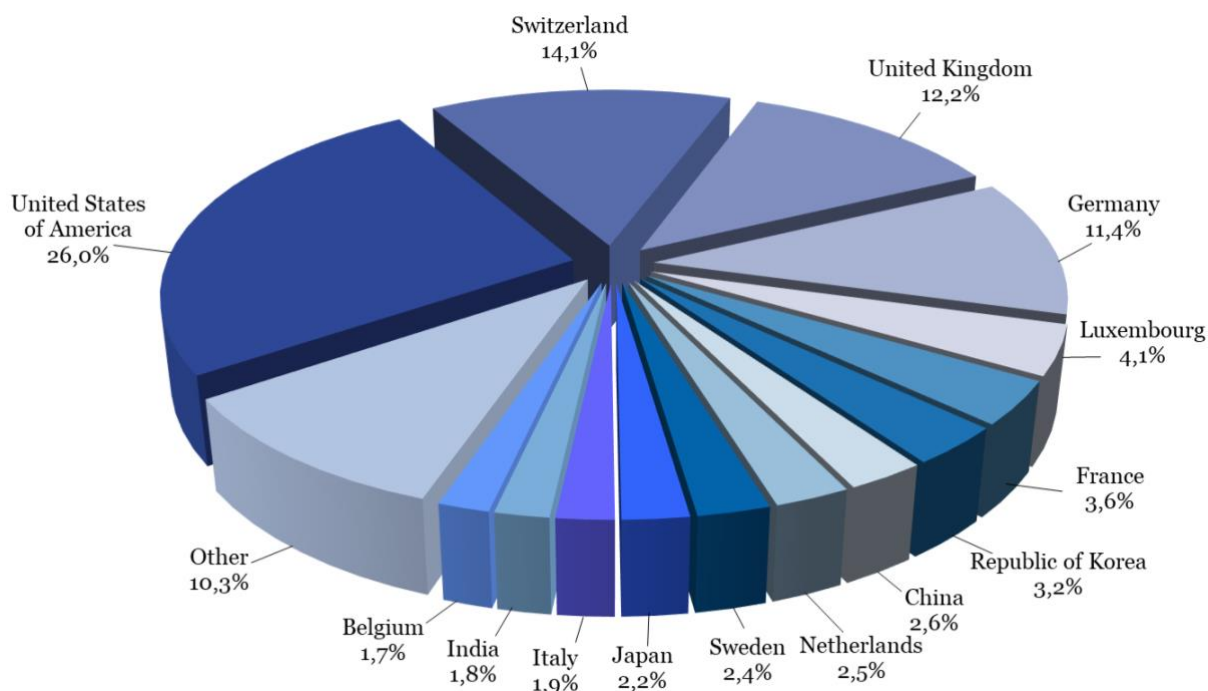


Figure 5. Non-resident Applications by Origin in the First Half of the Year from 2019 to 2023

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

Total number of patents granted is 642, decreased by 23.1% compared to the corresponding period of the previous year. Meanwhile the number of patents granted to non-resident applicants increased by 1.6% and amounted to 62.8% of the total number of patents granted for inventions (table 5, figure 6).

Table 5. Patents Granted in the First Half of the Year from 2019 to 2023

	2019	2020	2021	2022	2023	2023 to 2022
Total	1,198	1,061	1,221	835	642	76.9%
To residents	673	511	544	324	239	73.8%
To non-residents	525	550	677	511	403	78.9%

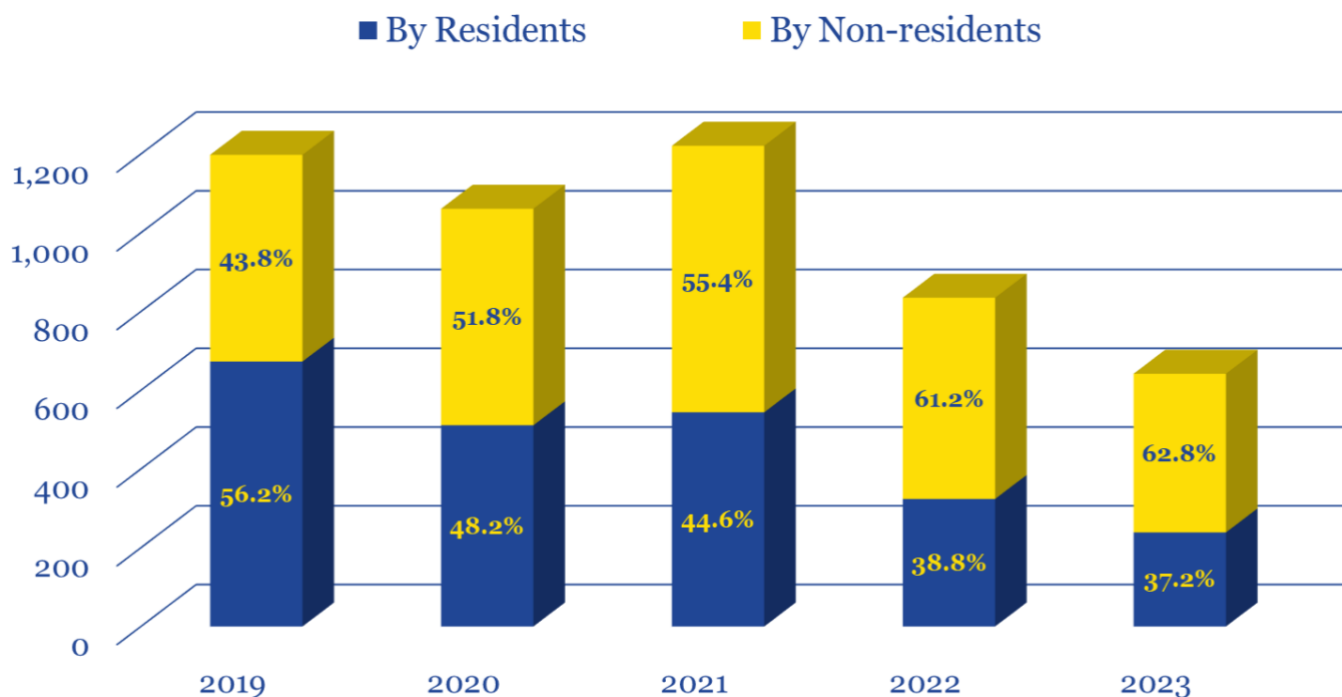


Figure 6. Trend in Patents Granted in the First Half of the Year from 2019 to 2023

3. Utility Models

The indicators of applications filed for utility models have a growing trend showing an increasing inventive activity of resident applicants: compared to the previous year, the total number of applications increased by 70.5%, mostly due to the resident applicants (70.6%). Share of non-resident applicants, as in previous years, is insignificant – 1.8% (31 applications).

Table 6. Applications for Utility Models in the First Half of the Year from 2019 to 2023¹

	2019	2020	2021	2022	2023 ²	2023 to 2022
Total	5,166	2,482	2,148	1,038	1,770	170.5%
Under the national procedure	5,162	2,475	2,145	1,037	1,767	170.4%
By residents	5,127	2,368	2,104	1,019	1,738	170.6%
By non-residents	35	107	41	18	29	161.1%
Under the PCT procedure	4	7	3	1	3	300.0%
Including resident applicants	–	–	–	–	1	–

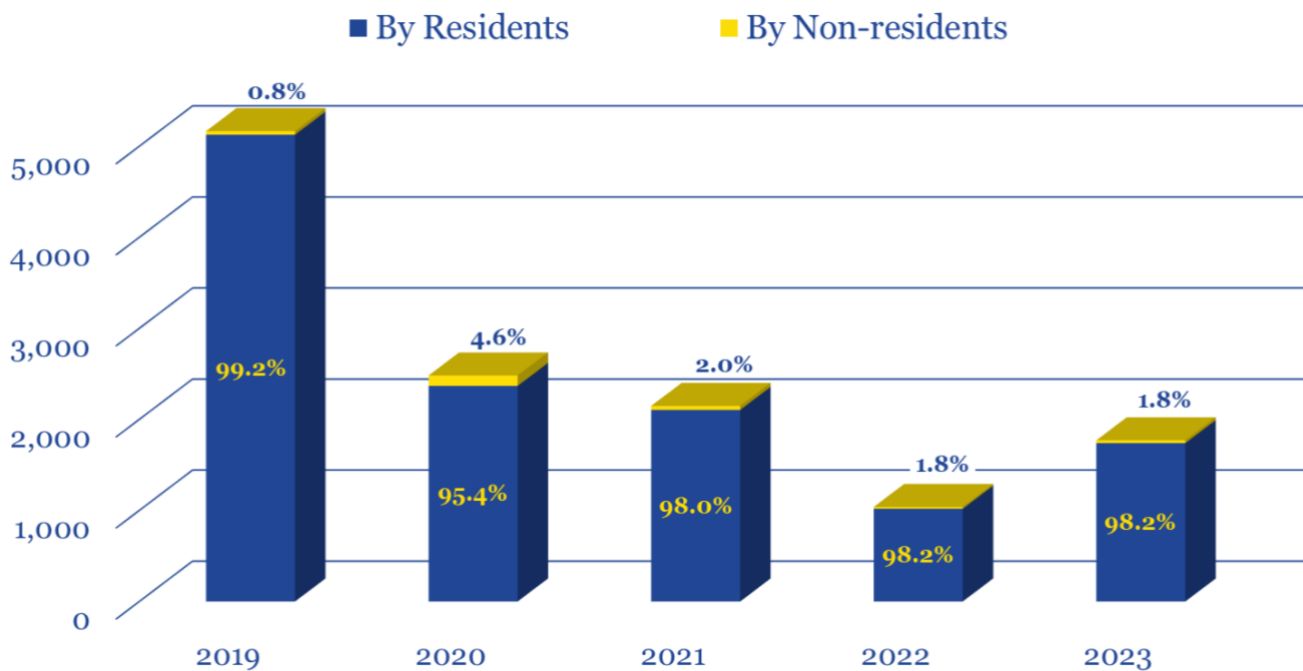


Figure 7. Trend in Applications for Utility Models in the First Half of the Year from 2019 to 2023

The indicators of patents granted for utility models have a decreasing trend, however there is a slight increase in the first half of 2023 (2.3%). In total more than 1.2 thousand registrations were made (table 7, figure 8).

Table 7. Utility Models Registrations in the First Half of the Year from 2019 to 2023

	2019	2020	2021	2022	2023	2023 to 2022
Total	4,513	3,516	2,355	1,198	1,225	102.3%
To residents	4,432	3,461	2,261	1,174	1,211	103.2%
To non-residents	81	55	94	24	14	58.3%

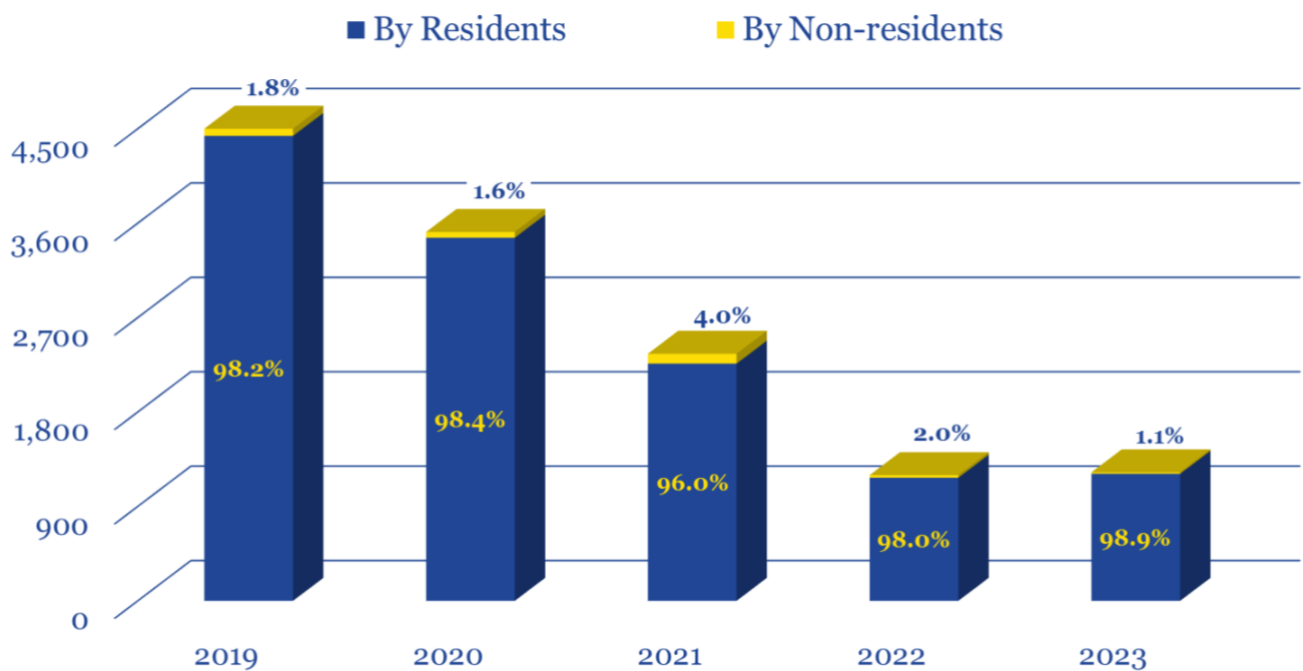


Figure 8. Trend in Utility Models Registrations in the First Half of the Year from 2019 to 2023

4. Industrial Designs

The number of applications for industrial designs in the first half of 2023 increased by 29.7%, comparing with the number of applications in the first half of 2022 by virtue of increased number of applications from resident applicants by 28.2%. Activity of non-resident applicants increased by 42.0% with the share of non-resident applicants being 12.5% of the total number of applications for industrial designs (table 8, figure 9).

Table 8. Applications for industrial designs in the First Half of the Year from 2019 to 2023¹

	2019	2020	2021	2022	2023 ²	2023 to 2022
Total	1,412	991	881	437	567	129.7%
By residents	1,300	856	790	387	496	128.2%
including legal entities	290	225	211	106	130	122.6%
By non-residents	112	135	91	50	71	142.0%

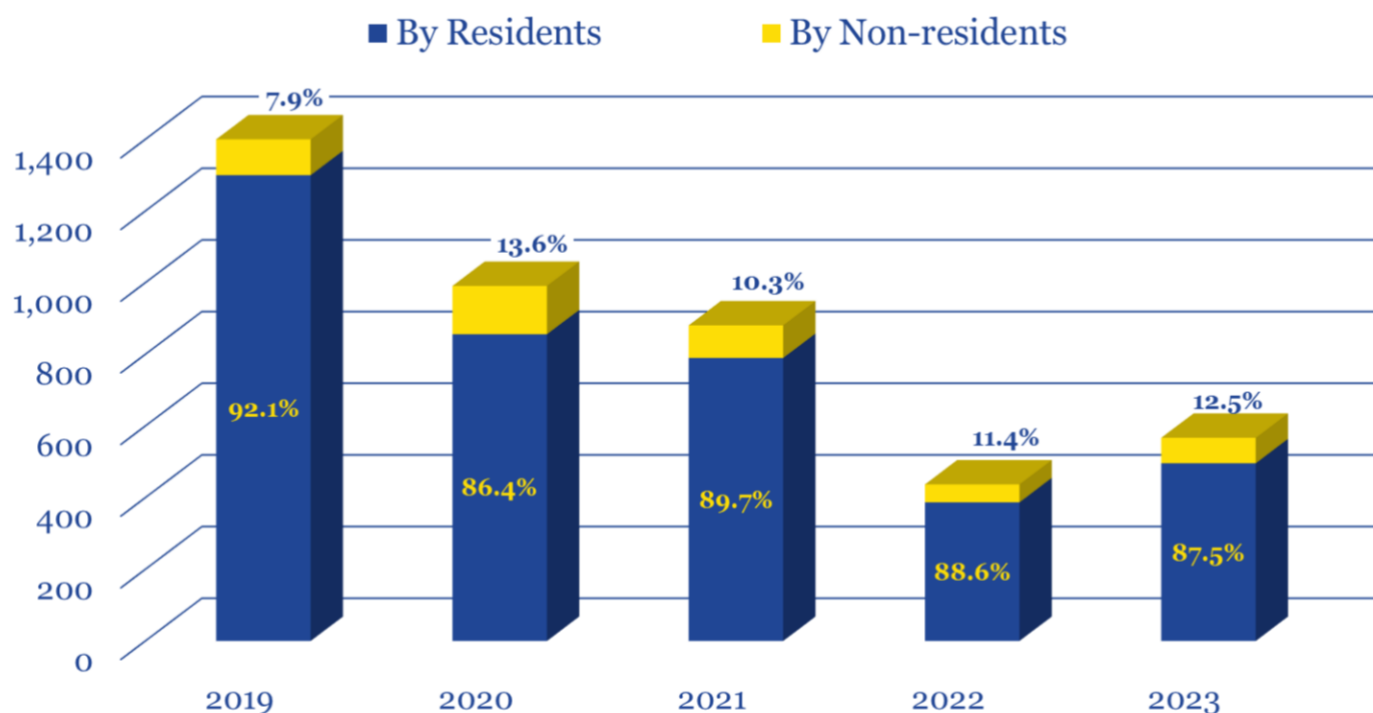


Figure 9. Trend in Industrial Designs Applications in the First Half of the Year from 2019 to 2023

During the first half of 2023, 275 industrial designs were registered which is 39.4% less comparing with the corresponding period of the previous year. The number of certificates granted to non-resident applicants decreased by 35.9% (table 9, figure 10).

Table 9. Industrial Design Registrations in the First Half of the Year from 2019 to 2023

	2019	2020	2021	2022	2023	2023 to 2022
Total	1,269	915	1,066	454	275	60.6%
To residents	1,186	837	933	415	250	60.2%

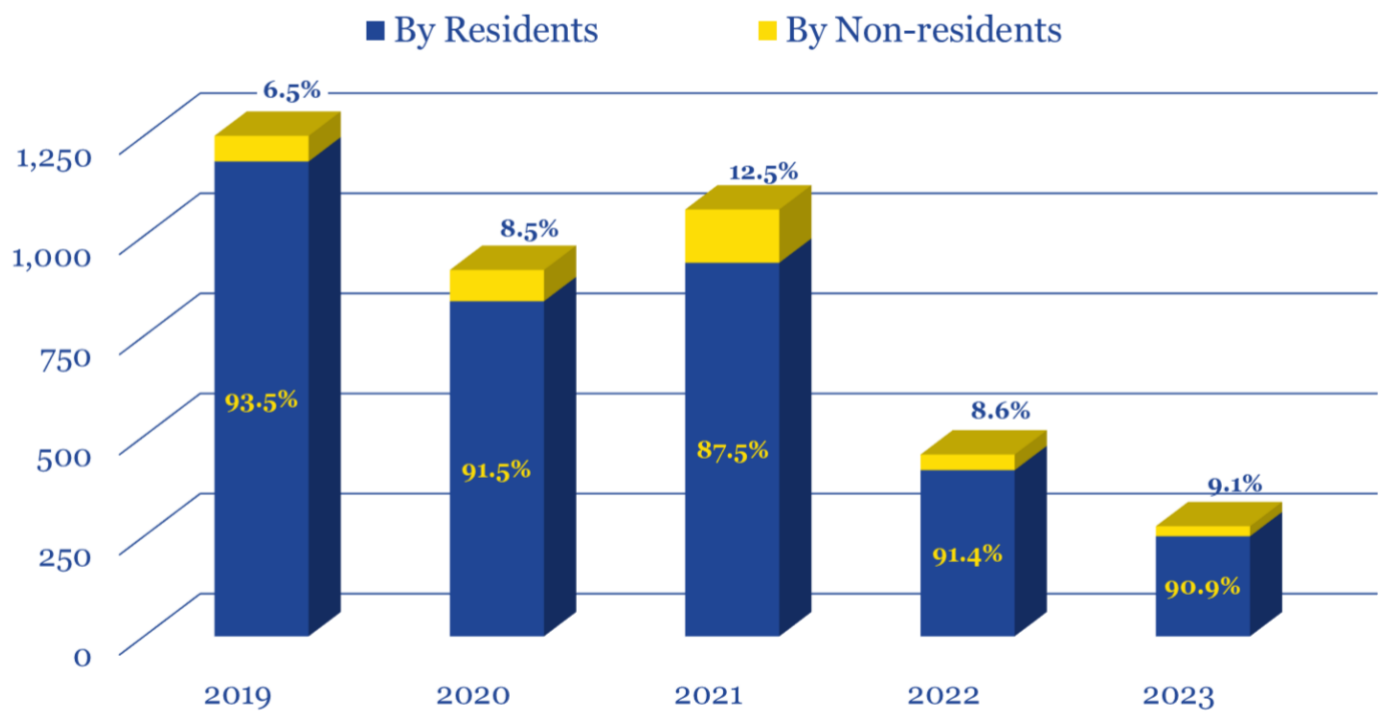


Figure 10. Trend in Industrial Design Registrations in the First Half of the Year from 2019 to 2023

5. Trademarks

In the first half of 2023, the indicator of filed applications for trademarks increased by 55.5%, comparing with the first half of 2022, however it is still below pre-war level. More than 11.4 thousand applications were filed, of which more than 10 thousand (89.7% of the total) were from resident applicants; meanwhile there was an insignificant decrease in applications from non-resident applicants (by 1.6%) compared to the previous year (table 10, figure 11).

Table 10. Trademark Applications (under the National Procedure) in the First Half of the Year from 2019 to 2023¹

	2019	2020	2021	2022	2023 ²	2023 to 2022
Total	15,815	12,647	15,670	7,366	11,455	155.5%
By residents	14,084	10,740	13,554	6,166	10,274	166.6%
By non-residents	1,731	1,907	2,116	1,200	1,181	98.4%

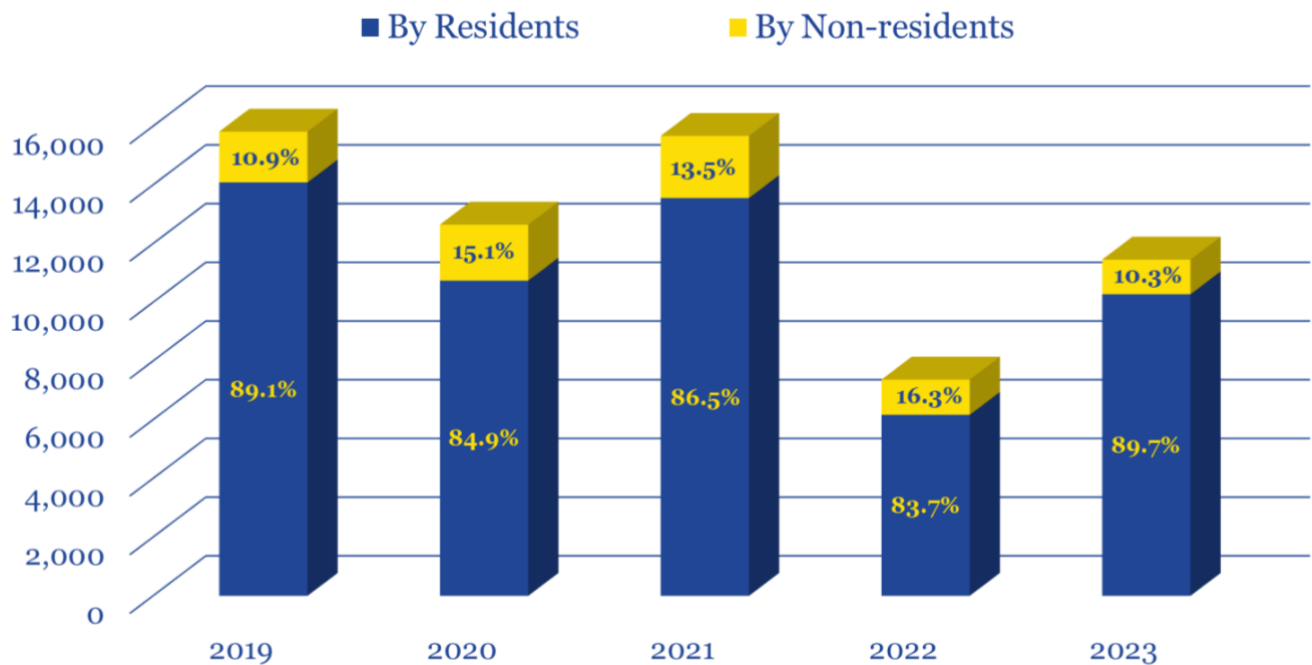


Figure 11. Trend in Trademark Applications (under the National Procedure) in the First Half of the Year from 2019 to 2023

The most active non-resident applicants in the first half of 2023 were applicants from the United States of America – 201 applications (17.0%), Cyprus – 130 applications (11.0%), Switzerland – 121 applications (10.2%), the United Kingdom – 108 applications (9.1%), China – 81 applications (6.9%), Poland – 60 applications (5.1%), Germany – 54 applications (4.6%), Estonia – 35 applications (3.0%), Hong Kong, China and Japan – 27 applications (2.3%) (figure 12, annex 13).

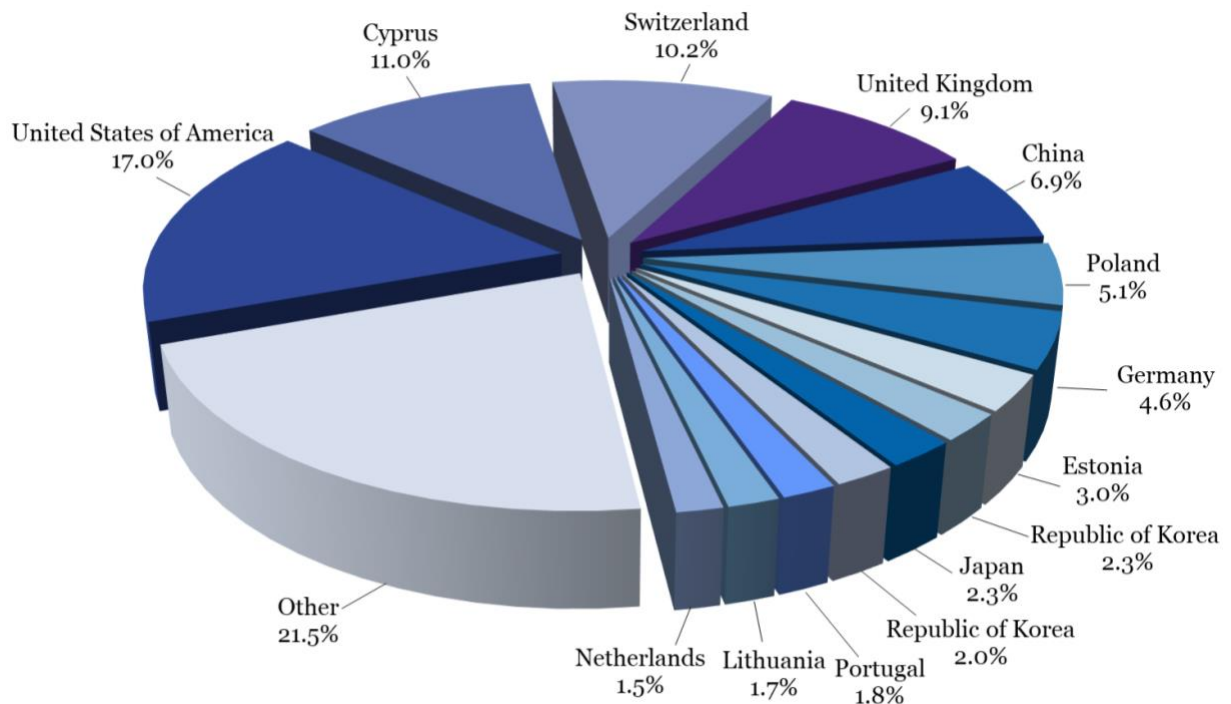


Figure 12. Trademark Applications (under the National Procedure) by Non-residents by Origin in the First Half of the Year from 2019 to 2023

Despite the challenging situation in the country, the total number of trademark registrations in the first half of 2023 exceeded more than 7.2 thousand. The share of resident registrations remains high (>80%), as it had been in the last 5 years (table 11, figure 12).

Table 11. Trademark Registrations (under the National Procedure) in the First Half of the Year from 2019 to 2023

	2019	2020	2021	2022	2023**	2023 to 2022
Total	8,906	8,561	12,026	10,047	7,252	72.2%
By residents	7,693	7,399	10,409	8,138	6,032	74.1%
By non-residents	1,213	1,162	1,617	1,909	1,220	63.9%

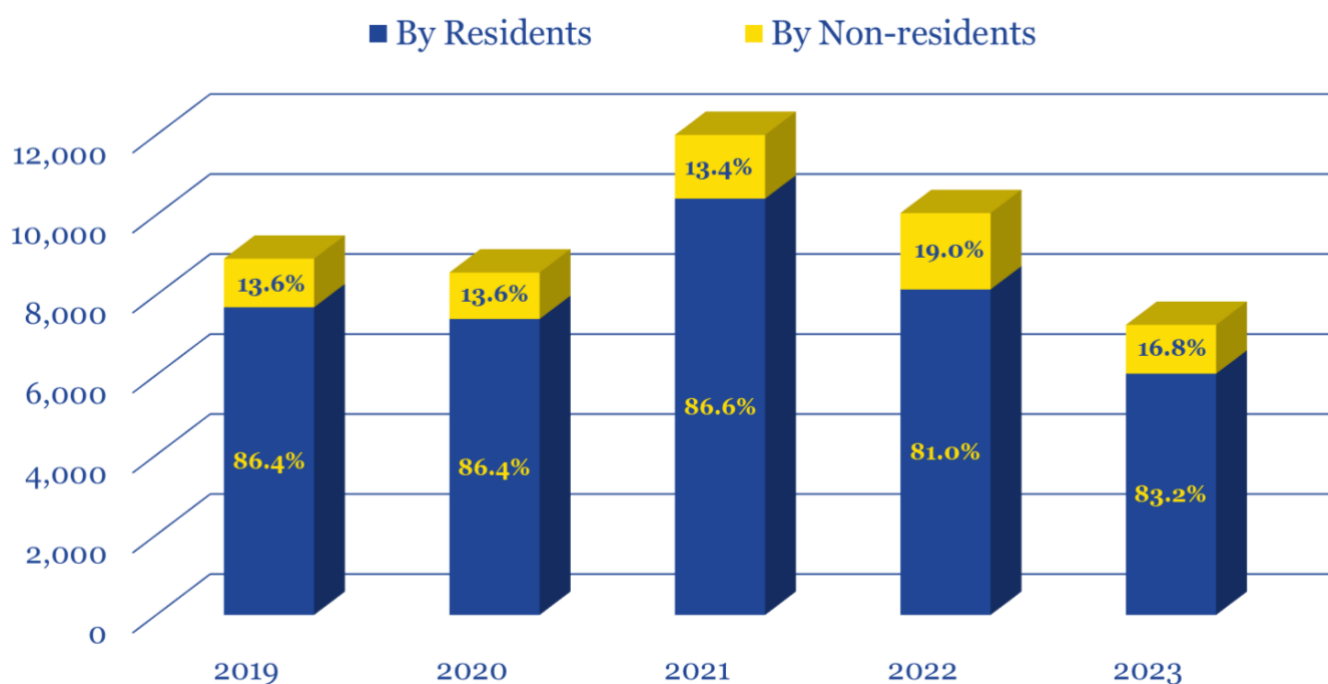


Figure 13. Trend in Trademark Registrations (under the National Procedure) in the First Half of the Year from 2019 to 2023

6. Copyright

During the first half of 2023, 4,083 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 70.8%, and the number of contracts relating to the copyright in a work almost exceeded 106.4% (table 12, figure 14).

Table 12. Applications for Registration of Copyright and Contracts Relating to the Author's Right in a Work in the First Half of the Year from 2019 to 2023¹

	2019	2020	2021	2022	2023 ²	2023 to 2022
Copyright in a work	4,777	2,643	3,823	2,527	4,083	161.6%
Copyright in a work made for hire	745	333	560	186	552	296.8%
Contracts on the transfer (alienation) of property rights in a work	228	159	253	93	187	201.1%
Contracts transfer of the right to use a work	14	4	10	1	7	–

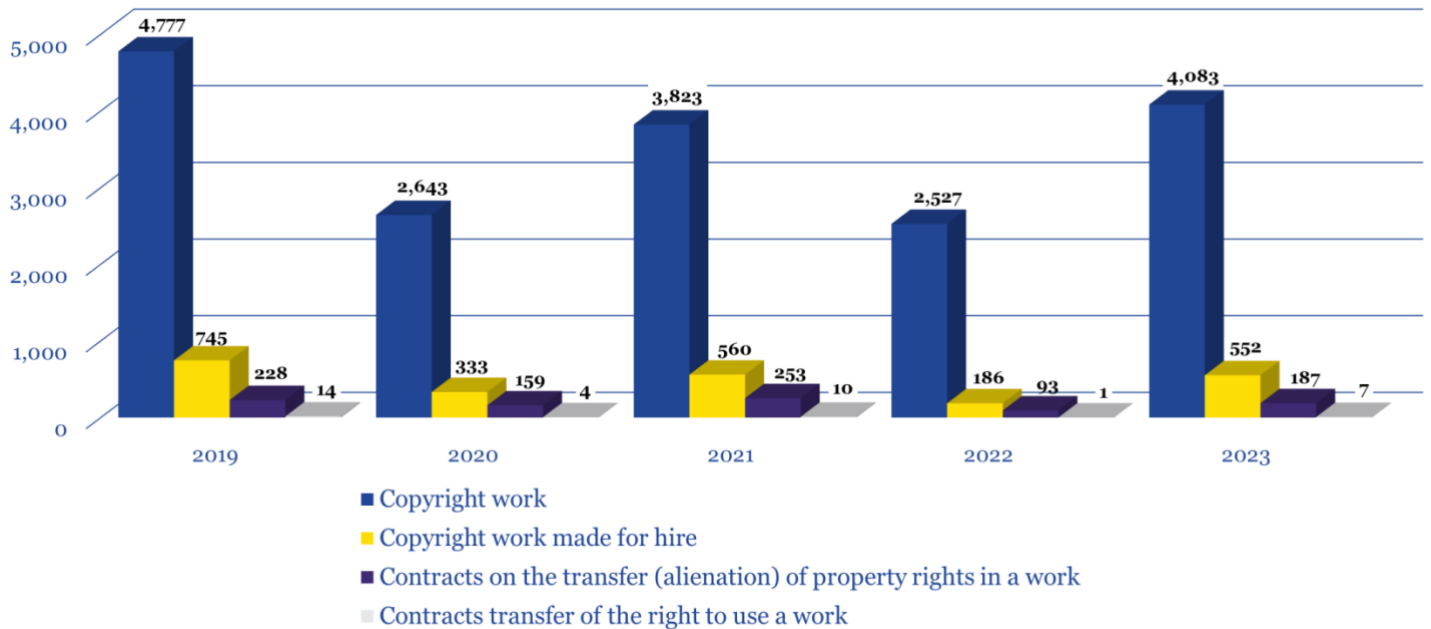


Figure 14. Trend in Applications for Registration of Copyright and Contracts Relating to the Author's Right in a Work in the First Half of the Year from 2019 to 2023

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 half of 2023. In total, over 5 thousand state registrations for copyright in works were made, which is the best indicator since 2020. Meanwhile 194 contracts relating to the copyright in a work were registered, doubled 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 Work in the First Half of the Year from 2019 to 2023

	2019	2020	2021	2022	2023	2023 to 2022
Copyright in a work	5,272	2,875	3,739	2,563	4,070	158.8%
Copyright in a work made for hire	928	380	601	253	578	228.5%
Contracts on the transfer (alienation) of property rights in a work	258	160	235	91	191	209.9%
Contracts transfer of the right to use a work	8	4	4	1	3	300.0%

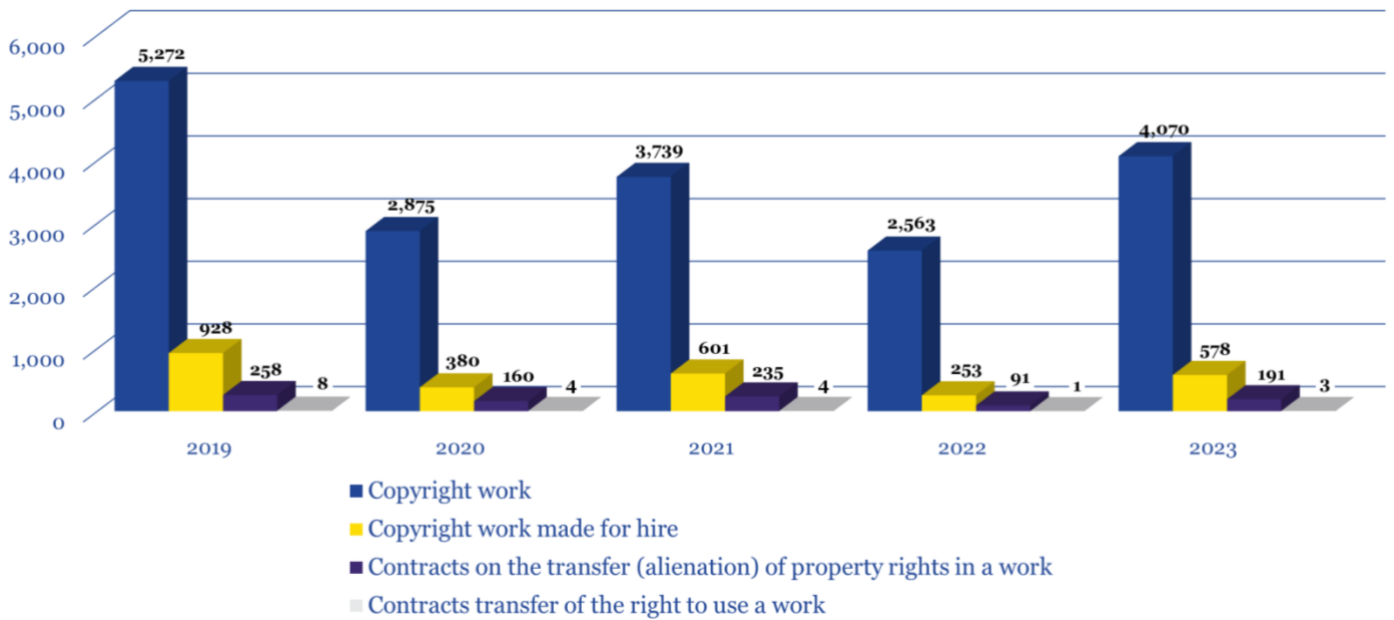


Figure 15. Trend in Registrations of Copyright and Contracts Relating to the Author's Right in a Work in the First Half of the Year from 2019 to 2023

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

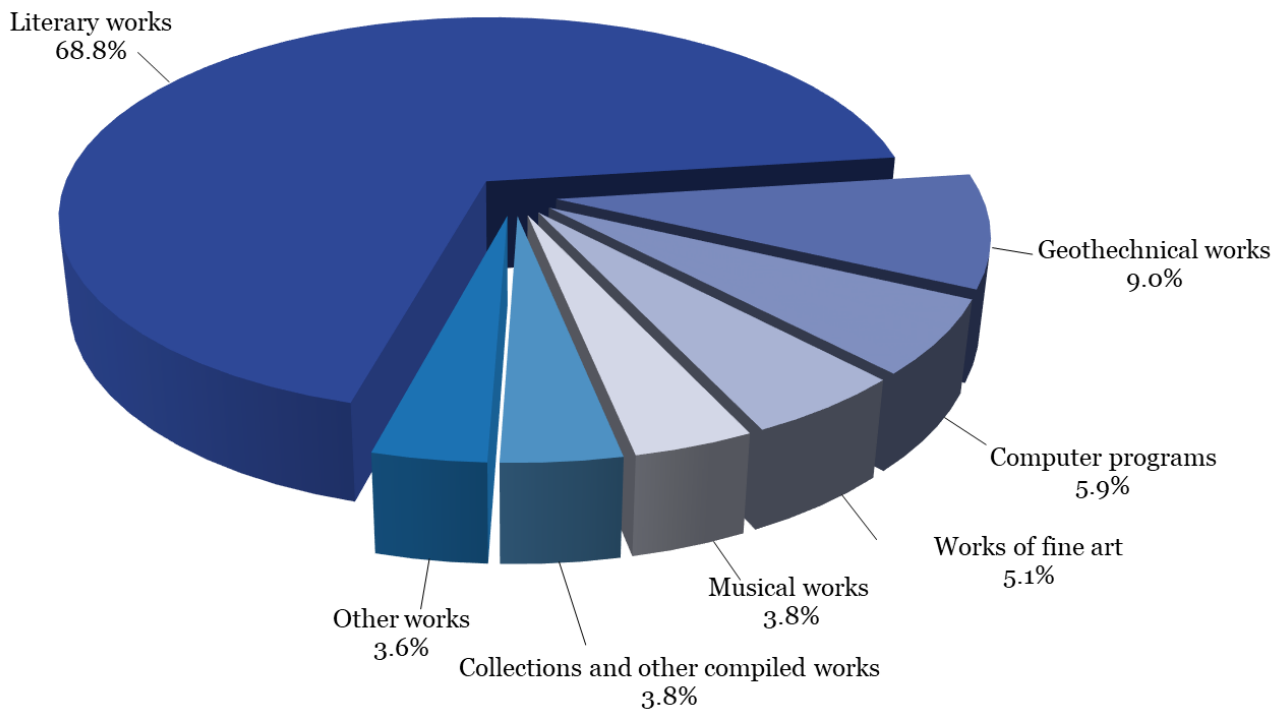


Figure 16. Distribution of the State Registrations of Copyright in a Work by Subject Matter in the First Half of 2023

II. Analysis of Inventive Activity of National Applicants

1. Applications for Inventions and Utility Models

Despite the the full-scale invasion by the russian federation lasting for more than a year, the inventive activity of resident applicants increased significantly in the first half of 2023: the indicators of filed applications for inventions and utility models reaching the pre-war levels of 2021. Comparing to the previous year, the number of resident applications for inventions and utility models increased by 69.0% in the first half of 2023.

Table 14. Inventions and Utility Models Applications by Residents in the First Half of the Year from 2019 to 2023¹

	2019	2020	2021	2022	2023 ²	2023 to 2022
Total	6,320	2,983	2,694	1,320	2,231	169.0%
Inventions, including						
legal entities	1,193	615	590	301	492	163.5%
individuals	684	296	323	182	269	147.8%
Utility models, including						
legal entities	509	319	267	119	223	187.4%
individuals	5,127	2,368	2,104	1,019	1,739	170.7%
legal entities	3,656	1,389	1,312	617	1,136	184.1%
individuals	1,471	979	792	402	603	150.0%

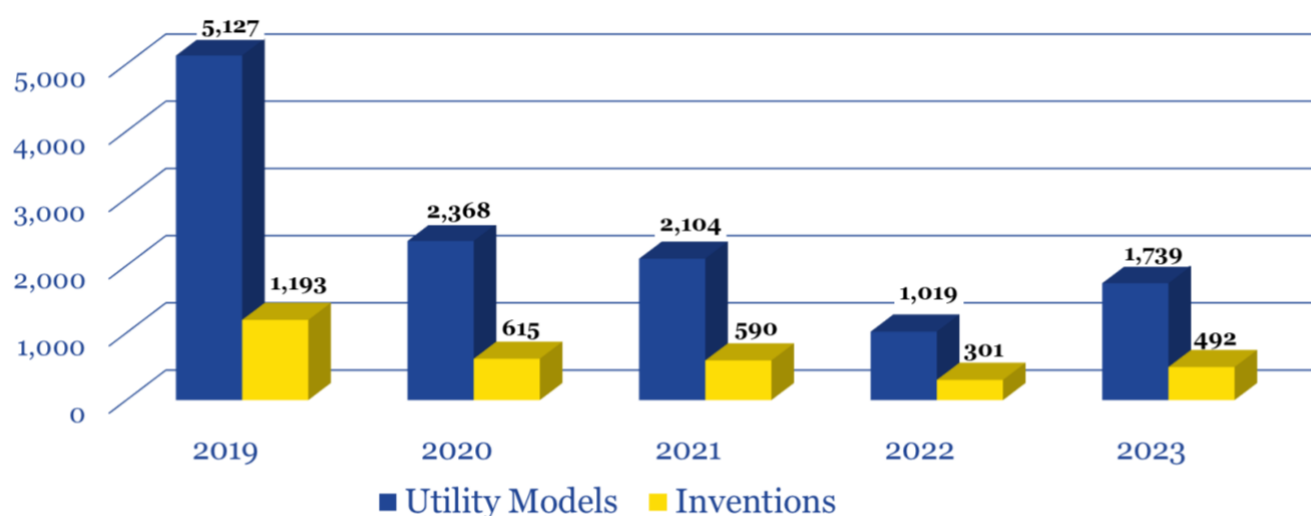


Figure 17. Trend Inventions and Utility Models Applications by Residents in the First Quarter from 2019 to 2023

Distribution of applications for inventions and utility models from resident legal entities in the first half of the year from 2019 to 2023 categorized by economic activities and by government authorities is presented in annexes 3, 4, 5, 6.

Higher educational institutions and scientific organizations with the highest inventive activity are presented in annexes 7, 8.

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

- Vinnytsia National Technical University – 113 applications
- Lviv Polytechnic National University - 54 applications
- Kharkiv National Automobile And Highway University – 52 applications
- Kryvyi Rih National University – 46 applications
- National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute" – 39 applications
- Lutsk National Technical University – 26 applications
- National University of Food Technologies – 24 applications
- Sumy National Agrarian University – 21 applications
- Volodymyr Dahl East Ukrainian National University – 21 applications
- Higher Educational Institution "Podillia State University" – 20 applications
- Central Ukrainian National Technical University – 20 applications

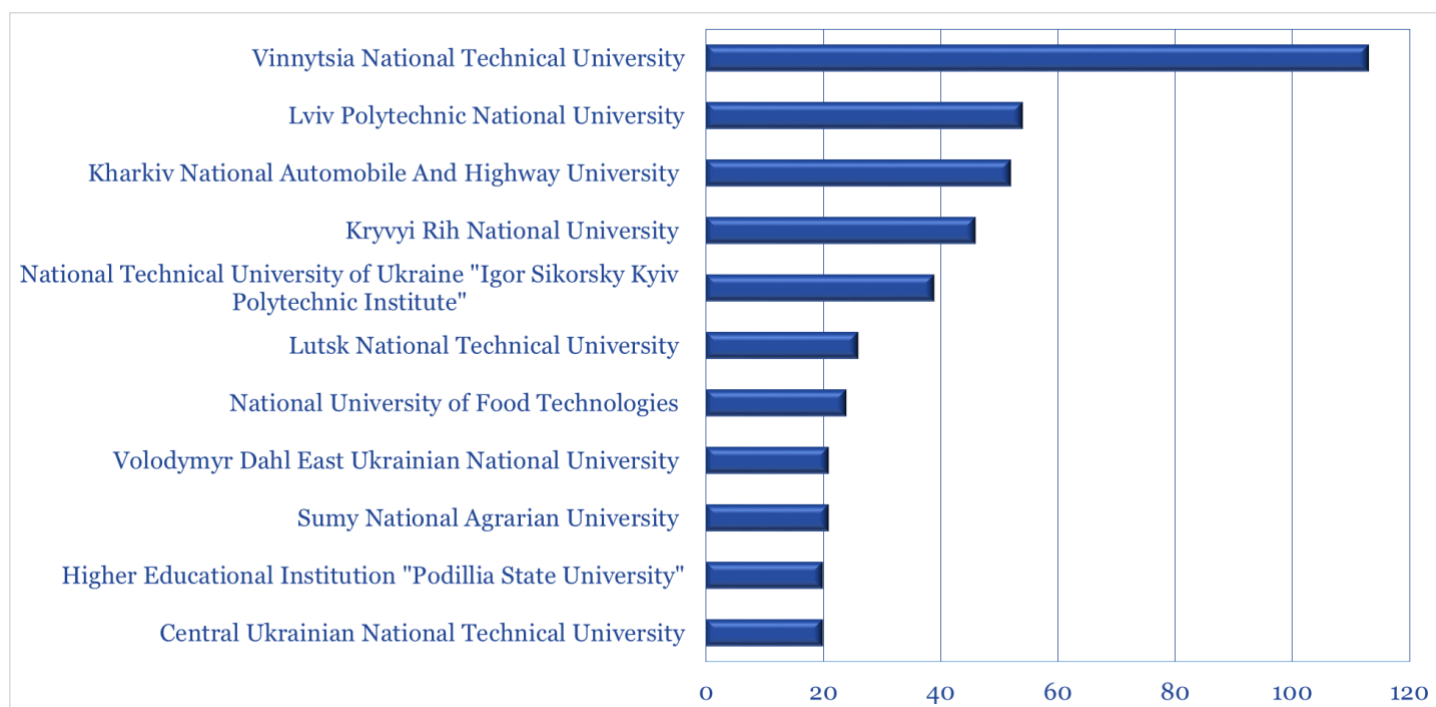


Figure 18. Higher Educational Institutions under the Ministry of Education and Science of Ukraine with the Highest Inventive Activity in the First Half of 2023

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

- Institute of Engineering Thermophysics – 18 applications;
- M.S. Poliakov Institute of Geotechnical Mechanics – 13 applications
- V. Bakul Institute for Superhard Materials – 10 applications
- Institute for Problems in Materials Science of I.M.Fratsevich – 6 applications
- L.V.Pisarzhevskii Institute of Physical Chemistry – 6 applications
- V.E. Lashkaryov Institute of Semiconductor Physics – 6 applications
- General Energy Institute – 5 applications
- Institute of Electrodynamics – 4 applications
- O. Ya. Usikov Institute for Radio Physics and Electronics – 4 applications
- Institute of Pulse Processes and Technologies – 4 applications
- Chuiko Institute of Surface Chemistry – 4 applications
- Institute of Thermoelectricity – 4 applications
- The Institute of Renewable Energy – 4 applications

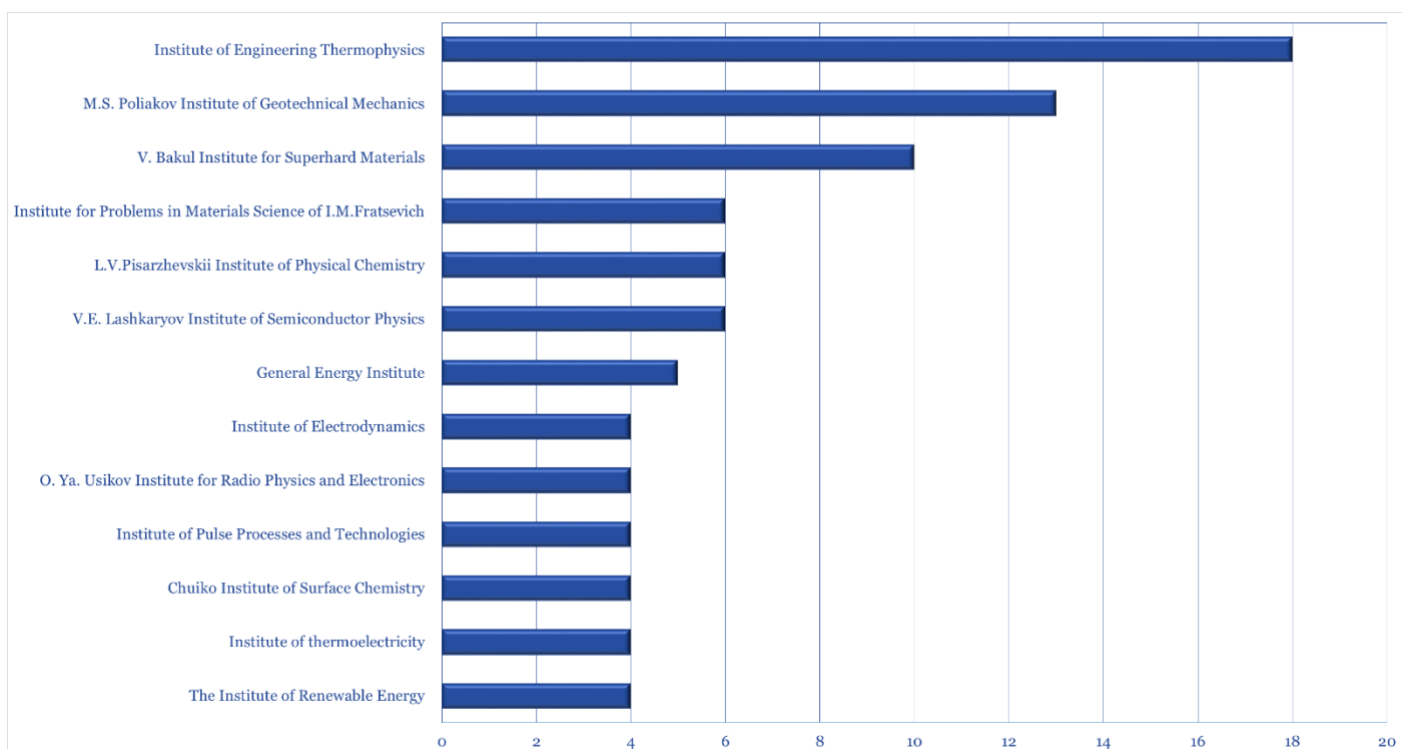


Figure 19. Institutions of National Academy of Sciences of Ukraine with the Highest Inventive Activity in the First Half of 2023

The leader in applications for inventions and utility models under the national procedure remains Kyiv with 587 applications (26.3% of the total number of resident applicants). The leading regions on the list are: Kharkiv – 306 applications (13.7%), Vinnytsia – 213 applications (9.6%), Dnipropetrovsk – 194 applications (8.7%), Lviv – 160 applications (7.2%), Kyiv – 101 applications (4.5%), Odesa – 74 applications (3.3%), Ternopil – 61 applications (2.7%), Poltava – 58 applications (2.6%) regions (figure 20, annex 9, 10).

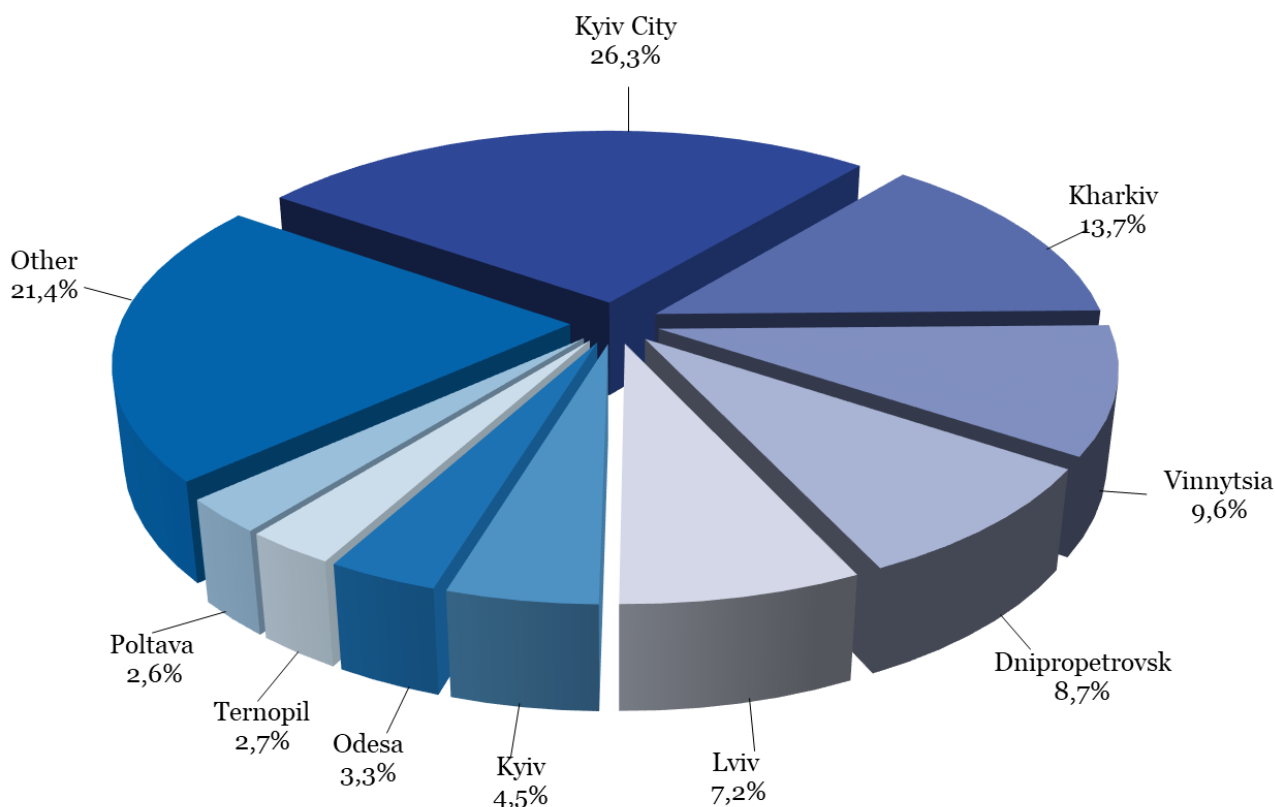


Figure 20. Applications for Inventions and Utility Models by Regions of Ukraine in the First Half of 2023

2. Registration of Inventions and Utility Models

Indicators of inventions and utility models registrations in the first half of 2023 remained almost on the same level as the indicators of the corresponding period the previous year. The total number of registrations from resident applicants is 1450, decreased by 3.2% compared to the corresponding period of the previous year, while number of utility models registrations increased by 3.2% (table 15, figure 21).

Table 15. Inventions and Utility Models Registrations by Residents in the First Half of the Year from 2019 to 2023

	2019	2020	2021	2022	2023	2023 to 2022
Total	5,105	3,972	2,805	1,498	1,450	96.8%
Inventions, including	673	511	544	324	239	73.8%
legal entities	450	324	362	190	170	89.5%
individuals	223	187	182	134	69	51.5%
Utility models, including	4,432	3,461	2,261	1,174	1,211	103.2%
legal entities	3,082	2,191	1,445	695	880	126.6%
individuals	1,350	1,270	816	479	331	69.1%

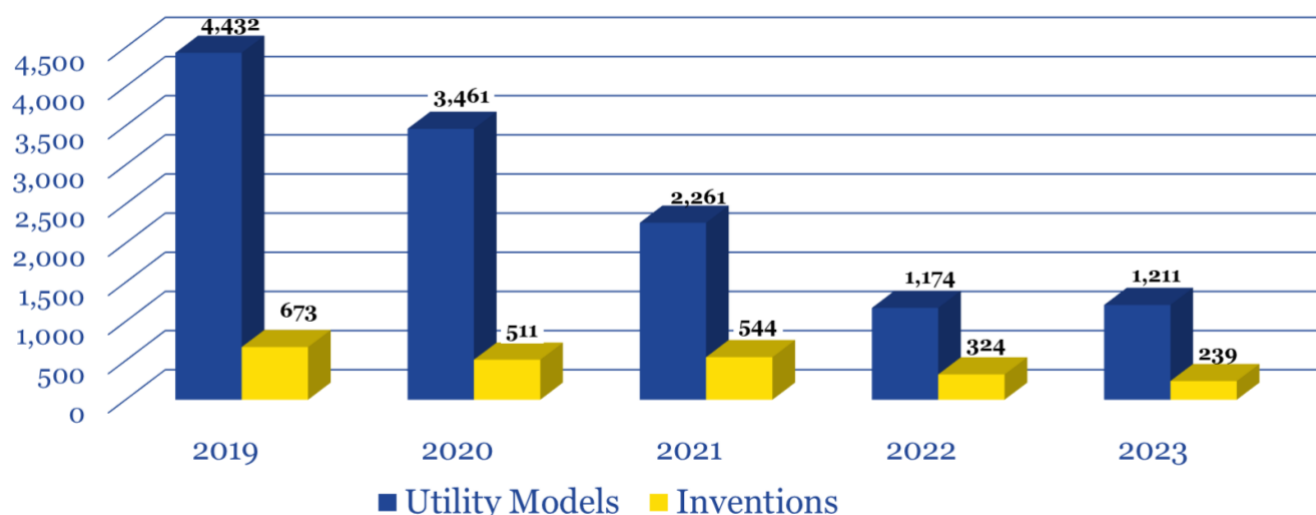


Figure 21. Trend in Inventions and Utility Models Registrations by Residents in the First Half of the Year from 2019 to 2023

Distribution of registrations for inventions and utility models by regions of Ukraine in the first half of the year from 2019 to 2023 is presented in annex 11.

Distribution of registrations for inventions and utility models from resident legal entities in the first half of the year from 2019 to 2023 categorized by economic activities is presented in annex 12.

III. Business Activity Analysis

Trademarks play a crucial role in the enterprise's development and popularization, as well as making customers distinguish its goods and services on the market. In 2021 alone, over 13.7 million applications for trademarks were filed worldwide. 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. In total, during the first half of 2023, over

10 thousand applications for trademarks were filed through the electronic filing system. 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 half of 2023, the share of resident applications for trademarks under the national procedure increased by 66.6%, compared to the first half of 2022, and amounted to 72.3% of the total number of applications, the share of applications from non-resident applicants was 27.7% (table 16).

The number of non-resident applicants filing applications under the Madrid system decreased by 25.0% compared to the first half of the previous year, and it accounted to 69.9% (figure 22).

Table 16. Applications for Trademarks in the First Half of the Year from 2019 to 2023¹

	2019	2020	2021	2022	2023 ²	2023 to 2022
Total	20,235	16,637	19,536	11,025	14,201	128.8%
By residents						
Under the national procedure	14,084	10,740	13,554	6,166	10,274	166.6%
By non-residents	6,151	5,897	5,982	4,859	3,927	80.8%
Under the national procedure	1,731	1,907	2,116	1,200	1,181	98.4%
Under the Madrid system	4,420	3,990	3,866	3,659	2,746	75.0%

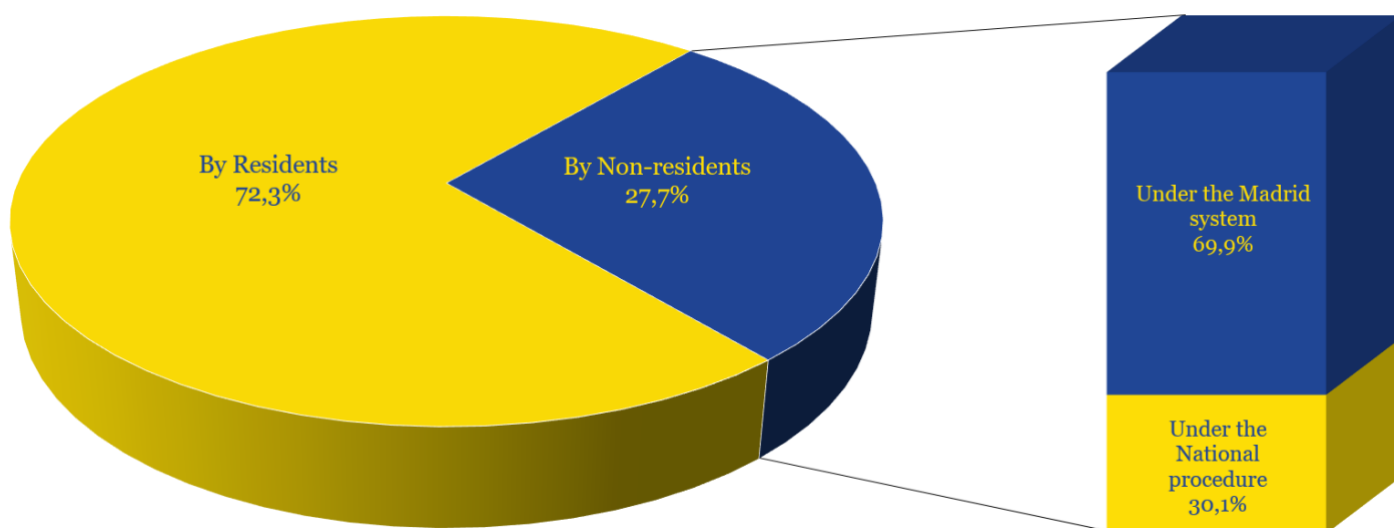


Figure 22. Correlation between Resident and Non-resident Applicants in the First Half of 2023

2. Business Priorities in the Goods and Services Sector

In the first half of 2023, the largest number of applications for trademarks under the national procedure was filed under the 35-th Class of the Nice Classification (4,127 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 the National Procedure in the First Half of 2023

NCL Class	Class Heading	qty	By Residents	By non-residents
35	Advertising; business management, organization and administration; office functions.	4,127	3,945	182
41	Education; providing of training; entertainment; sporting and cultural activities.	1,461	1,342	119
5	Pharmaceuticals, medical and veterinary preparations; sanitary preparations for medical purposes; dietetic food and substances...	1,087	761	326
30	Coffee, tea, cocoa and substitutes therefor; rice, pasta and noodles; tapioca and sago; flour and preparations made from cereals...	973	908	65
43	Services for providing food and drink; temporary accommodation.	948	919	29
9	Scientific, research, navigation, surveying, photographic, cinematographic, audiovisual, optical, weighing, measuring, signalling, detecting, testing, inspecting, life-saving and teaching apparatus and instruments...	795	635	160
42	Scientific and technological services, research and design relating thereto...	777	672	105
25	Clothing, footwear, headwear.	760	713	47
44	Medical services; veterinary services; hygienic and beauty care for human beings or animals; agriculture, aquaculture, horticulture and forestry services.	727	685	42
29	Meat, fish, poultry and game; meat extracts; preserved, frozen, dried and cooked fruits and vegetables; jellies, jams, compotes; eggs; milk, cheese, butter, yogurt and other milk products; oils and fats for food.	608	567	41

Among the national companies with the highest number of filed applications for trademarks in the first half of 2023, there are (figure 23):

- Limited Liability Company SPACEIKS (Kyiv)
- Joint Stock Company FARMAK (Kyiv)
- Limited Liability Company GAMEDEV (Kyiv)
- Limited Liability Company KIDDISVIT (Dnipropetrovsk region)
- Limited Liability Company UKRAINIAN TOBACCO PRODUCTION (Rivne region)
- Private joint stock company OBOLON (Kyiv)
- Private joint stock company CARLSBERG UKRAINE (Zaporizhzhia region)
- Limited Liability Company DELTA MEDICAL (Kyiv region)
- Limited Liability Company RIVERGATE (Dnipropetrovsk region)
- Limited Liability Company NATURPRODUKT – VEHA (Ternopil region)

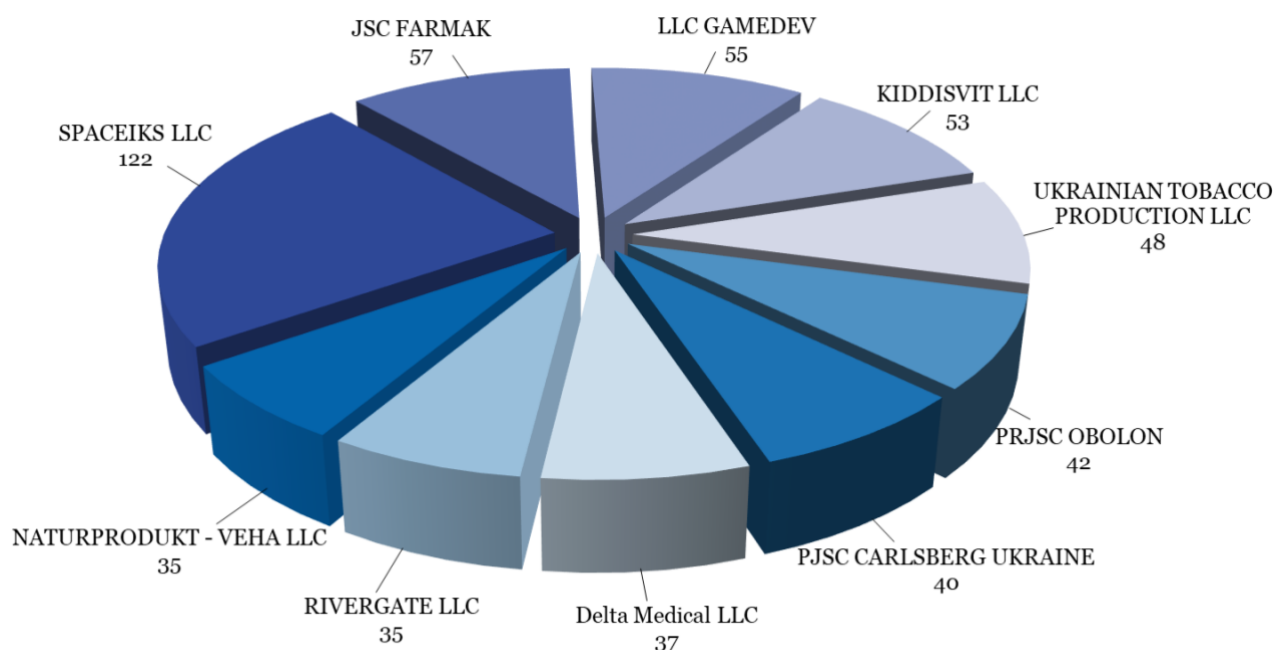


Figure 23. National Companies with the Highest Number of Filed Applications for Trademarks in the First Half of 2023

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

- GSH Trademarks Limited (Cyprus)
- Mistral Capital Management Limited (United Kingdom)
- Philip Morris Products S.A. (Switzerland)
- RIA.com Marketplaces OU (Estonia)
- British American Tobacco (Brands) Limited (United Kingdom)
- Farmak group limited (Cyprus)
- AQUA NRG INVESTMENTS Limited (Cyprus)
- CITYSPACE SOLUTIONS LDA (Portugal)
- Bayer Aktiengesellschaft (Germany)
- Philip Morris Brands Sarl (Switzerland)

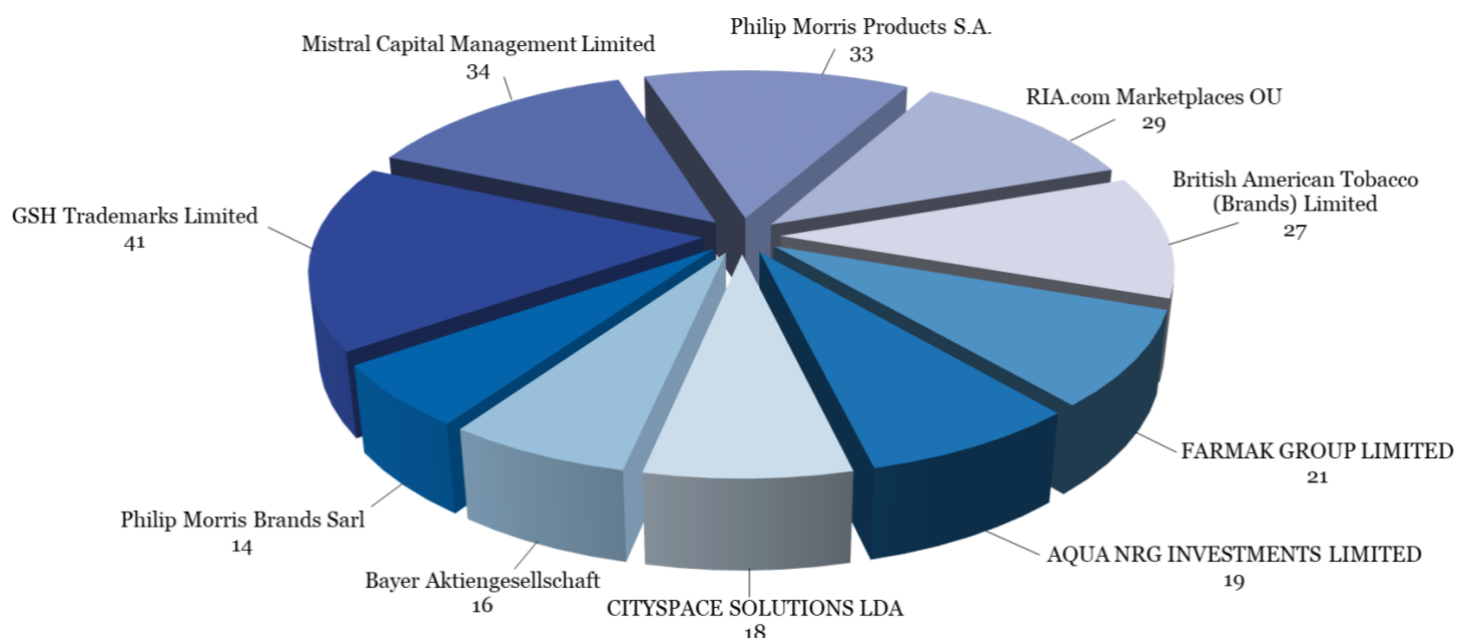


Figure 24. The Most Active Foreign Companies in the First Half of 2023

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

	2019	2020	2021	2022	2023
Total	1,193	615	590	301	492
<i>Electrical engineering</i>					
Electrical machinery, apparatus, energy	50	25	22	12	21
Audio-visual technology	6	2	2	3	1
Telecommunications	10	7	6	–	3
Digital communication	5	3	2	–	–
Basic communication processes	7	7	8	6	1
Computer technology	19	7	12	6	9
IT methods for management	6	2	2	2	1
Semiconductors	4	4	3	1	2
<i>Instruments</i>					
Optics	8	2	7	3	–
Measurement	87	47	37	17	9
Analysis of biological materials	34	10	7	2	2
Control	27	15	11	4	3
Medical technology	79	60	33	10	13
<i>Chemistry</i>					
Organic fine chemistry	28	9	14	10	2
Biotechnology	11	4	5	5	1
Pharmaceuticals	81	39	31	13	14
Macromolecular chemistry, polymers	13	4	4	4	–
Food chemistry	73	21	24	19	4
Basic materials chemistry	28	17	21	6	5
Materials, metallurgy	40	25	44	28	14
Surface technology, coating	29	14	24	10	2
Micro-structural and nano-technology	7	3	6	3	3
Chemical engineering	66	28	21	15	10
Environmental technology	20	10	14	6	8
<i>Mechanical engineering</i>					
Handling	37	23	16	6	3
Machine tools	37	22	12	13	6
Engines, pumps, turbines	67	44	23	9	9
Textile and paper machines	9	1	2	3	3
Other special machines	75	37	37	25	19
Thermal processes and apparatus	25	19	6	2	4
Mechanical elements	35	13	19	5	4
Transport	52	18	34	10	13
<i>Other fields</i>					
Furniture, games	13	11	9	4	5
Other consumer goods	13	13	6	4	2
Civil engineering	57	24	34	16	20
Unknown	35	25	32	19	276

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

	2019	2020	2021	2022	2023
Total	828	838	1,002	922	929
<i>Electrical engineering</i>					
Electrical machinery, apparatus, energy	14	13	14	16	19
Audio-visual technology	3	2	10	12	1
Telecommunications	1	1	3	2	1
Digital communication	2	8	5	9	1
Basic communication processes	–	2	–	–	–
Computer technology	8	12	12	13	10
<i>Instruments</i>					
Optics	2	–	1	1	1
Measurement	17	7	11	10	12
Analysis of biological materials	4	7	5	5	10
Control	7	3	5	6	4
Medical technology	20	18	12	15	17
<i>Chemistry</i>					
Organic fine chemistry	77	81	99	97	76
Biotechnology	89	68	112	104	77
Pharmaceuticals	154	178	231	191	155
Macromolecular chemistry, polymers	15	18	7	6	4
Food chemistry	35	29	25	28	21
Basic materials chemistry	72	54	82	62	66
Materials, metallurgy	29	40	35	42	46
Surface technology, coating	12	25	17	14	10
Micro-structural and nano-technology	–	–	1	1	–
Chemical engineering	18	23	21	20	21
Environmental technology	5	6	10	5	7
<i>Mechanical engineering</i>					
Handling	26	11	12	14	24
Machine tools	13	16	16	11	8
Engines, pumps, turbines	13	14	13	18	12
Textile and paper machines	10	4	7	6	10
Other special machines	62	42	43	48	39
Thermal processes and apparatus	10	10	10	11	6
Mechanical elements	10	16	10	13	6
Transport	10	26	13	11	14
<i>Other fields</i>					
Furniture, games	11	8	9	2	9
Other consumer goods	51	61	110	101	153
Civil engineering	24	21	34	20	30
Unknown	–	9	1	3	52

**Distribution of Resident Applications for Inventions from Legal Entities by Economic Activities
in the First Half of the Year from 2019 to 2023**

	2019	2020	2021	2022	2023
Total	684	296	323	182	269
Agriculture, forestry and fishing	4	–	–	–	–
Mining and quarrying	2	–	–	–	3
Manufacturing, including	22	17	12	9	7
Manufacture of food products, beverages and tobacco	1	–	1	–	2
Manufacture of textiles and textile products, leather and leather products	–	–	–	–	–
Manufacture of wood and wood products, paper and paper products; publishing and printing	–	–	–	1	–
Manufacture of coke and refined petroleum products	–	–	–	–	–
Manufacture of chemicals and chemical products	4	–	3	1	–
Manufacture of basic pharmaceutical products and pharmaceutical preparations	2	1	1	–	–
Manufacture of rubber and plastic products	3	2	–	–	–
Manufacture of fabricated metal products, except machinery and equipment	4	1	–	1	–
Manufacture of computer, electronic and optical products	1	3	2	1	1
Manufacture of electrical equipment	3	2	–	2	–
Manufacture of machinery and equipment n.e.c.	4	6	4	1	–
Manufacture of motor vehicles, trailers and semi-trailers and other transport equipment	–	1	1	2	–
Manufacture of furniture, Other manufacturing, Repair and installation of machinery and equipment	–	1	–	–	4
Electricity, gas, steam and air conditioning supply	–	1	–	–	–
Water supply; sewerage, waste management and remediation activities	–	–	–	–	–
Construction	–	1	1	–	–
Wholesale and retail trade; repair of motor vehicles and motorcycles	4	3	7	–	2
Transportation and storage	5	–	–	–	–
Information and communication	4	5	3	–	3
Financial and insurance activities	–	–	–	–	–
Real estate activities	–	–	–	–	–
Professional, scientific and technical activities	193	85	112	52	69
Scientific research and development	176	73	103	51	67
Administrative and support service activities	–	–	2	–	–
Education	443	180	185	112	152
Human health and social work activities	4	4	1	1	–
Other	3	–	–	8	33

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

	2019	2020	2021	2022	2023
Total	3,656	1,389	1,312	617	1,136
Agriculture, forestry and fishing	4	6	3	–	1
Mining and quarrying	14	3	9	4	7
Manufacturing, including	103	78	62	27	17
Manufacture of food products, beverages and tobacco	5	2	5	–	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	4	4	1	1	–
Manufacture of coke and refined petroleum products	–	–	–	–	–
Manufacture of chemicals and chemical products	4	1	1	2	–
Manufacture of basic pharmaceutical products and pharmaceutical preparations	3	–	2	3	1
Manufacture of rubber and plastic products	8	7	4	4	4
Manufacture of fabricated metal products, except machinery and equipment	13	6	4	4	1
Manufacture of computer, electronic and optical products	9	3	3	1	2
Manufacture of electrical equipment	4	4	3	3	1
Manufacture of machinery and equipment n.e.c.	42	34	21	5	5
Manufacture of motor vehicles, trailers and semi-trailers and other transport equipment	10	15	12	4	1
Manufacture of furniture, Other manufacturing, Repair and installation of machinery and equipment	1	2	5	–	1
Electricity, gas, steam and air conditioning supply	–	1	–	–	–
Water supply; sewerage, waste management and remediation activities	–	–	–	–	1
Construction	4	1	2	–	–
Wholesale and retail trade; repair of motor vehicles and motorcycles	13	20	15	11	4
Transportation and storage	6	3	3	1	5
Information and communication	14	7	7	–	3
Financial and insurance activities	2	–	1	–	–
Real estate activities	4	1	2	–	1
Professional, scientific and technical activities	1,098	222	196	101	152
Scientific research and development	1,078	204	181	97	150
Administrative and support service activities	3	4	1	–	4
Education	2,329	981	992	435	848
Human health and social work activities	47	47	12	4	5
Other	15	15	7	34	88

Distribution of Resident Applications for Inventions and Utility Models from Legal Entities by Economic Activities in the First Half of the Year from 2019 to 2023

	2019	2020	2021	2022	2023
Total	4,340	1,685	1,635	799	1,405
Agriculture, forestry and fishing	8	6	3	–	1
Mining and quarrying	16	3	9	4	10
Manufacturing, including	125	95	74	36	24
Manufacture of food products, beverages and tobacco	6	2	6	–	3
Manufacture of textiles and textile products, leather and leather products	–	–	1	–	–
Manufacture of wood and wood products, paper and paper products; publishing and printing	4	4	1	2	–
Manufacture of coke and refined petroleum products	–	–	–	–	–
Manufacture of chemicals and chemical products	8	1	4	3	–
Manufacture of basic pharmaceutical products and pharmaceutical preparations	5	1	3	3	1
Manufacture of rubber and plastic products	11	9	4	4	4
Manufacture of fabricated metal products, except machinery and equipment	17	7	4	5	1
Manufacture of computer, electronic and optical products	10	6	5	2	3
Manufacture of electrical equipment	7	6	3	5	1
Manufacture of machinery and equipment n.e.c.	46	40	25	6	5
Manufacture of motor vehicles, trailers and semi-trailers and other transport equipment	10	16	13	6	1
Manufacture of furniture, Other manufacturing, Repair and installation of machinery and equipment	1	3	5	–	5
Electricity, gas, steam and air conditioning supply	–	2	–	–	–
Water supply; sewerage, waste management and remediation activities	–	–	–	–	1
Construction	4	2	3	–	–
Wholesale and retail trade; repair of motor vehicles and motorcycles	17	23	22	11	6
Transportation and storage	11	3	3	1	5
Information and communication	18	12	10	–	6
Financial and insurance activities	2	–	1	–	–
Real estate activities	4	1	2	–	1
Professional, scientific and technical activities	1,291	307	308	153	221
Scientific research and development	1,254	277	284	148	217
Administrative and support service activities	3	4	3	–	4
Education	2,772	1,161	1,177	547	1,000
Human health and social work activities	51	51	13	5	5
Other	18	15	7	42	121

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

	2019	2020	2021	2022	2023
Total	4,340	1,685	1,635	799	1,405
Ministry of Education and Science of Ukraine	2,040	730	856	485	793
The National Academy of Sciences of Ukraine	347	135	183	100	145
Ministry of Health of Ukraine	1,269	387	261	23	118
Ministry of Defence of Ukraine	32	22	22	11	48
The National Academy of Agrarian Sciences (NAAS) of Ukraine	103	56	62	22	35
State Emergency Service of Ukraine	48	16	33	19	26
National Academy of Medical Sciences of Ukraine	127	81	22	13	12
State Reserve Agency of Ukraine	–	–	–	3	12
Government of Ukraine	18	11	6	7	10
Ministry of Internal Affairs of Ukraine	5	4	7	4	9
The Ukroboronprom State Concern	6	5	4	10	9
Security Service of Ukraine	–	7	1	3	4
Other Government Agencies	345	231	178	99	184

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

	2019	2020	2021	2022	2023
Total	2,772	1,161	1,177	547	1,000
Vinnitsia National Technical University	45	36	30	22	113
National Pirogov Memorial Medical University, Vinnytsya	32	26	7	–	54
Lviv Polytechnic National University	39	27	29	23	54
Kharkiv National Automobile and Highway University	32	10	10	3	52
Kyiv National University	21	7	21	27	46
National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"	152	15	16	20	39
Ivan Kozhedub National Air Force University	10	12	14	3	35
Lutsk National Technical University	15	5	18	5	26
National University of Food Technologies	202	31	16	20	24
Volodymyr Dahl East Ukrainian National University	9	13	33	20	21
Sumy National Agrarian University	13	5	1	9	21
Central Ukrainian National Technical University	24	15	17	7	20
Higher Educational Institution "Podillia State University"	11	1	9	11	20
Uzhhorod National University	43	13	27	19	18
National Technical University – "Kharkiv Polytechnic Institute"	111	26	24	5	18
National University of Civil Protection of Ukraine	46	11	28	16	18
The National University of Water and Environmental Engineering	33	14	11	12	17
National University of Life and Environmental Sciences Of Ukraine	77	21	25	7	16
I. Horbachevsky Ternopil National Medical University	137	154	170	5	16
Ivan Franko National University of Lviv	12	3	3	12	16
Uman National University of Horticulture	26	6	22	12	15
Ternopil Ivan Puluj National Technical University	33	39	4	14	14
Dnipro University of Technology	9	7	18	22	13
Poltava State Medical University				2	13
Poltava State Agrarian University	20	8	26	15	12
Dniprovsky State Technical University	9	7	6	4	12
Ukrainian State University of Railway Transport	8	–	22	2	11
The National Defence University of Ukraine named after Ivan Cherniakhovskyi	9	6	5	6	11
The National Academy of the National Guard of Ukraine	18	11	6	7	10
Other	1,576	632	559	217	245

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

	2019	2020	2021	2022	2023
Total	1,254	277	284	148	217
Institute of Engineering Thermophysics of NAS of Ukraine	10	3	5	4	18
M.S. Poliakov Institute of Geotechnical Mechanics of NAS of Ukraine	35	5	25	6	13
The Ukrainian State Scientific Research Institute "Resurs"	–	–	–	3	12
V. Bakul Institute for Superhard Materials	11	12	11	4	10
Institute for Problems in Materials Science of I.M.Fratsevich of NAS of Ukraine	8	3	3	–	6
V.E. Lashkaryov Institute of Semiconductor Physics of NAS of Ukraine	18	2	11	9	6
L.V.Pisarzhevskii Institute of Physical Chemistry of NAS of Ukraine	13	6	8	8	6
Physical-Chemical Institute for Environmental and Human Protection under NAS and MES of Ukraine	7	9	5	5	5
Sytenko Institute of Spine and Joint Pathology National Academy of Medical Sciences of Ukraine	10	4	1	1	5
General Energy Institute of NAS of Ukraine	–	–	–	2	5
Ukrainian Institute for Plant Variety Examination	–	–	–	–	4
Institute of Thermoelectricity under NAS and MES of Ukraine	10	2	3	5	4
Chuiko Institute of Surface Chemistry under NAS of Ukraine	6	2	2	–	4
Institute of Pulse Processes and Technologies of NAS of Ukraine	11	3	–	–	4
O. Ya. Usikov Institute for Radio Physics and Electronics	4	–	–	–	4
Institute of Thermoelectricity	10	4	7	3	4
Institute of Veterinary Medicine of the NAAS	–	1	1	–	4
The Institute of Renewable Energy of NAS of Ukraine	3	–	3	1	4
Institute Of Food Resources	2	–	1	–	3
Institute of Pig Breeding and Agricultural Production of the NAAS of Ukraine	5	4	4	4	3
National Scientific Center "Institute of Experimental and Clinical Veterinary Medicine"	18	11	4	1	3
The Institute of Vegetable and Melon Growing of the National Academy of Agrarian Sciences of Ukraine	1	–	–	1	3
A. V. Bogatsky Physico-Chemical Institute of NAS of Ukraine	6	1	1	3	3
Institute of Animal Breeding and Genetics nd. a. M.V.Zubets of National Academy of Agrarian Science of Ukraine	–	2	–	–	3
Institute of Macromolecular Chemistry of NAS of Ukraine	14	4	4	4	3
S.P. Timoshenko Institute of Mechanics of NAS of Ukraine	1	–	–	–	3
Joint-Stock Company "Scientific and Technological Complex 'ELECTROPRYLAD' "	–	–	–	1	3
Other	1,051	199	185	83	72

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

	Utility Models					Inventions				
	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
Total	5,127	2,368	2,104	1,019	1,739	1,193	615	590	301	492
The Autonomous Republic of Crimea	2	3	–	–	–	1	1	–	–	–
Vinnitsia	713	69	61	34	193	27	27	17	10	20
Volyn	27	33	36	13	47	3	1	3	4	3
Dnipropetrovsk	388	192	243	120	158	97	61	65	48	36
Donetsk	155	98	64	7	38	41	22	13	2	6
Zhytomyr	53	29	18	8	9	16	9	5	3	6
Zakarpattia	40	20	21	14	19	25	9	14	9	13
Zaporizhzhia	182	74	42	14	26	31	20	21	12	15
Ivano-Frankivsk	74	57	34	23	21	29	19	11	9	7
Kyiv Region	85	51	44	32	70	28	20	28	10	31
Kirovohrad	30	20	22	10	23	12	12	4	3	3
Luhansk	63	35	48	23	22	9	6	4	–	4
Lviv	198	107	101	68	107	53	19	40	20	53
Mykolayiv	94	25	35	6	23	16	7	8	2	5
Odesa	201	125	97	40	54	78	41	47	18	20
Poltava	136	77	78	50	53	19	6	11	–	5
Rivne	65	26	22	18	21	9	–	1	1	2
Sumy	52	33	29	21	30	14	11	16	7	13
Ternopil	224	205	198	32	54	17	16	4	6	7
Kharkiv	782	336	299	131	247	195	87	83	32	59
Kherson	79	46	29	19	5	10	10	8	2	2
Khmelnyskyi	54	26	32	23	48	7	5	2	–	3
Cherkasy	59	31	47	21	35	23	8	1	7	3
Chernivtsi	129	43	31	22	10	2	–	2	1	1
Chernihiv	31	16	13	7	10	12	5	5	1	1
Kyiv	1,211	590	459	261	413	419	193	176	94	174
Sevastopol	–	–	1	–	3	–	–	1	–	–
Objects with a limited access	–	1	–	1	–	–	–	–	–	–
Unknown	–	–	–	1	–	–	–	–	–	–

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

	2019	2020	2021	2022	2023
Total	6,320	2,983	2,694	1,320	2,231
The Autonomous Republic of Crimea	3	4	–	–	–
Vinnitsia	740	96	78	44	213
Volyn	30	34	39	17	50
Dnipropetrovsk	485	253	308	168	194
Donetsk	196	120	77	9	44
Zhytomyr	69	38	23	11	15
Zakarpattia	65	29	35	23	32
Zaporizhzhia	213	94	63	26	41
Ivano-Frankivsk	103	76	45	32	28
Kyiv Region	113	71	72	42	101
Kirovohrad	42	32	26	13	26
Luhansk	72	41	52	23	26
Lviv	251	126	141	88	160
Mykolayiv	110	32	43	8	28
Odesa	279	166	144	58	74
Poltava	155	83	89	50	58
Rivne	74	26	23	19	23
Sumy	66	44	45	28	43
Ternopil	241	221	202	38	61
Kharkiv	977	423	382	163	306
Kherson	89	56	37	21	7
Khmelnyskyi	61	31	34	23	51
Cherkasy	82	39	48	28	38
Chernivtsi	131	43	33	23	11
Chernihiv	43	21	18	8	11
Kyiv	1,630	783	635	355	587
Sevastopol	–	–	2	–	3
Objects with a limited access	–	1	–	1	–
Unknown	–	–	–	1	–

**Resident Registrations for Inventions and Utility Models by Region of Ukraine
in the First Half of the Year from 2019 to 2023**

	Utility Models					Inventions				
	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
Total	4,432	3,461	2,261	1,174	1,211	673	511	544	324	239
The Autonomous Republic of Crimea	6	3	5	–	–	1	2	–	–	–
Vinnitsia	142	212	98	41	84	11	4	10	5	5
Volyn	20	11	34	10	25	2	3	3	–	3
Dnipropetrovsk	348	300	233	105	86	58	56	36	45	17
Donetsk	135	129	70	25	20	19	16	21	5	8
Zhytomyr	34	33	17	10	10	9	9	1	1	1
Zakarpattia	40	44	30	8	18	11	12	10	7	12
Zaporizhzhia	277	164	227	56	23	16	19	12	9	10
Ivano-Frankivsk	55	50	39	21	23	10	9	11	8	7
Kyiv Region	60	72	65	28	32	31	15	12	22	15
Kirovohrad	45	35	24	21	19	8	9	7	–	–
Luhansk	76	45	30	8	18	4	3	2	2	–
Lviv	165	145	81	51	65	34	35	32	21	5
Mykolayiv	73	57	29	21	11	9	7	6	2	2
Odesa	200	130	77	50	38	60	37	31	21	10
Poltava	127	81	65	44	33	1	3	8	5	3
Rivne	47	39	20	14	19	1	–	–	–	1
Sumy	38	68	38	21	25	8	9	10	5	3
Ternopil	245	104	47	32	35	6	6	6	7	4
Kharkiv	636	558	293	210	206	104	70	91	46	27
Kherson	47	47	31	18	13	5	1	2	–	1
Khmelnyskyi	67	35	34	22	21	1	2	1	–	1
Cherkasy	38	66	32	15	31	5	1	12	2	4
Chernivtsi	128	72	50	26	11	4	1	1	–	1
Chernihiv	30	17	15	5	6	9	8	7	4	2
Kyiv	1,353	942	577	311	337	246	173	212	107	97
Sevastopol	–	–	–	1	–	–	1	–	–	–
Objects with a limited access	–	2	–	–	2	–	–	–	–	–

Distribution of Resident Registrations for Both Inventions and Utility Models from Legal Entities by Economic Activities in the First Half of the Year from 2019 to 2023

	2019	2020	2021	2022	2023
Total	3,532	2,515	1,807	885	1,050
Agriculture, forestry and fishing	5	2	3	–	2
Mining and quarrying	15	7	7	5	5
Manufacturing, including	107	108	117	37	33
Manufacture of food products, beverages and tobacco	9	8	9	–	–
Manufacture of textiles and textile products, leather and leather products	–	2	1	1	–
Manufacture of wood and wood products, paper and paper products; publishing and printing	2	1	1	1	–
Manufacture of coke and refined petroleum products	–	–	–	–	–
Manufacture of chemicals and chemical products	5	4	2	–	1
Manufacture of basic pharmaceutical products and pharmaceutical preparations	14	5	3	1	2
Manufacture of rubber and plastic products	5	8	18	6	5
Manufacture of fabricated metal products, except machinery and equipment	15	7	12	7	1
Manufacture of computer, electronic and optical products	9	10	3	5	2
Manufacture of electrical equipment	2	11	11	2	5
Manufacture of machinery and equipment n.e.c.	29	38	33	13	3
Manufacture of motor vehicles, trailers and semi-trailers and other transport equipment	12	9	18	1	14
Manufacture of furniture, Other manufacturing, Repair and installation of machinery and equipment	5	5	6	–	–
Electricity, gas, steam and air conditioning supply	1	–	–	–	–
Water supply; sewerage, waste management and remediation activities	–	–	2	–	–
Construction	1	2	2	–	1
Wholesale and retail trade; repair of motor vehicles and motorcycles	18	24	22	8	12
Transportation and storage	4	1	4	2	2
Information and communication	18	9	4	5	–
Financial and insurance activities	2	–	1	–	–
Real estate activities	2	2	1	–	–
Professional, scientific and technical activities	713	514	334	210	210
Scientific research and development	679	473	310	191	208
Administrative and support service activities	2	3	1	–	–
Education	2,574	1,776	1272	595	738
Human health and social work activities	55	56	14	5	8
Other	15	11	23	18	39

**Non-resident Applications for Trademarks under the National Procedure by Origin
in the First Half of the Year from 2019 to 2023**

	2019	2020	2021	2022	2023
Total	1,731	1,907	2,116	1,200	1,181
United States of America	351	438	426	230	201
Cyprus	253	237	218	158	130
Switzerland	163	209	246	128	121
United Kingdom	100	70	90	52	108
China	123	91	138	95	81
Poland	33	40	54	27	60
Germany	51	81	52	74	54
Estonia	10	14	21	1	35
Hong Kong, China	10	42	10	7	27
Japan	51	51	40	28	27
Republic of Korea	49	64	46	34	24
Portugal	3	0	4	3	21
Lithuania	20	11	15	6	20
Netherlands	23	17	56	34	18
Austria	8	16	23	10	15
Other	483	526	677	313	239