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**ON THE INTELLECTUAL
PROPERTY POLICY AT
UNIVERSITIES AND
SCIENTIFIC-RESEARCH
INSTITUTIONS OF
AZERBAIJAN**

Baku – 2018

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Chairman of Board of the Intellectual Property Agency of the Republic of Azerbaijan.

On the IP policy at universities and scientific-research institutions of Azerbaijan". Baku, 2018

This brochure has been prepared on the basis of the results of the analysis made by the Copyright Agency of the Republic of Azerbaijan during the recent years and is recommended for the use at universities and scientific-research institutions forming IP policy. The brochure has been recycled and improved in 2016.

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I. Introductory remarks

1. There is a state policy concerning the field of the Intellectual Property (it can be a model for university), and the local policy of the university also plays an important role.

1.1 The state policy in the intellectual property, in a broad meaning, is a legislative, normative-legal, and administrative base in the area of the recognition, protection and enforcement of the rights, being also a system of special documents, such as “Azerbaijan 2020: Look into the Future” (in seven paragraphs, IP is mentioned as a priority direction) addressing IP issues. Besides, the work is being conducted to combine the “National IP Strategy” (approved with the order dated 28.12.2012 numbered 147 regarding copyright and related rights) with the National Industrial Design Strategy (a joint order by the State Committee for the Standardisation, Metrology and Patent and Copyright Agency, dated 11.03.2011, numbered 37).

“Azerbaijan model” of the sustainable development conducted by Ilham Aliiev, the President of the Republic of Azerbaijan, prioritise economic reforms, stability, and social orientation, relies on the multiculturalism, cultural diversity, and traditions, considers innovativeness, modernisation, knowledge-based prosperity, and the priority of the ICT and IP. In the modern world, the importance of the IP is defined according to the level of knowledge and experiences, human capital and intellect, as the IP phenomenon is born from the existing knowledge and becomes complete with the knowledge formation. And because of this, the existence of the dynamic information structures, ensuring the communicativeness of knowledge and information, is

considered when assessing the level of “knowledge-based society” and the impact of the IP, in other words, these are opportunities for the **spread of IP**, qualitative activity of the innovation systems by professional experts, or the **use of the IP**. Furthermore, knowledge formation and acquisition requires the existence of the scientific and creative structures guaranteeing their activities, in other words, assessment of the conditions of the **emergence of the IP**.

Mister President, during the I Congress of Azerbaijani scientists, mentioned that, “...The sustainable development of our economy, the formation of the knowledge-based society, and investments in human capital is our main strategic purpose for the close perspective”. In another speech of the Head of the State, he mentions: “...human capital and intellect play a decisive role as a new quality factor in the prosperity of the modern civilisation. The way to welfare and strength for each state is the one passing through science and innovation development.

As a result of this, more attention is given to education and science, an increase in the government funding on them year by year. Considering this, a new systematic approach to the IP system is needed at higher education and scientific-research institutions. The changed context of the function of the IP, to the same extent, demands the change of our attitude towards IP.

1.2 The IP policy (in the IP area) of the university or scientific-research institute (hereinafter referred to as universities) is its official legal position in IP-related matters.

This is important, as universities are the main creators of IP, they must have their own local policy, and mainly they have to officially regulate this. Hereby, IP is

regarded the strategic resource of the university. By considering the gained experience on the IP management, our education institutions can afford this task. The main difficulty – is the lack of the national norms concerning the commercialisation of the results of intellectual activities, and the Law on “Science” relating to this issue will be adopted in near future.

2. The experience of foreign universities

2.1. The history of the issue: the USA (in 1932, “The Patent policy” firstly adopted in the MIT; California University, 1943; University of Pennsylvania, 1953; Harvard University, 1975) – these are the “first swallows” of the university policy in the IP field.

2.2. Bayh-Dole Act of 1980, The Stevenson-Wydler Technology Innovation Act – are legislative and normative acts concerning commercialisation of the results of intellectual activities.

So, 1980-90’s have become a turning point for the American higher education institutions in the IP field:

a) Till that time (1980) a classical American higher education institution performed the function of the **generator and collector of new knowledge**, the transfer of them to the society happened through teaching students, specialists, publication in articles and monographs, and participation at conferences and seminars. Only a small part of the results of scientific-research work belonged to industry, and transfer of the technology made by universities to companies was a rare case;

b) Under the strict international concurrency competitiveness of the companies was mostly determined by the share of knowledge-based products launched by them, therefore, companies did not satisfy

with their own research, or when they did not have opportunities to do it they started to address the commercialisation of the university applications.

c) Till 1980 the right to the results of university applications funded by the state was being given to the Federal Government, but it did not have a special mechanism or a policy for the commercialisation of those results (till 1980 the Federal Government could license only four percent out of 30000 patents).

The crucial contribution of the Bayh-Dole Act is the creation of the uniform Federal Patent or IP policy, according to which universities have a right to the IP objects, created by using state funding.

Thus, a new approach created such environment where the government, by refusing the property, brought the real owners of the results of the intellectual activity – universities to the market and stimulated the establishment of the necessary infrastructure for the legal protection, transfer, and commercialisation of technologies.

2.3. The similar trend is also observed at European universities, although they have lagged behind the American universities in time and qualitative development of the IP management system. However, they actively acquire the experience of American universities by considering the legal and other national features.

2.4. The experience of universities of various countries, mainly the basis of the success of term “a period from principal researches to industrial production”, based on developed administrative-legal mechanisms combining creation, protection and transfer of new technologies, have been generalised in the following documents of the WIPO:

- WIPO University Initiative. University IP Coordinator (2003).
- Guidance for the Elaboration of Intellectual Property (IP) Strategies in Countries in Transition (after 2007) is the main document as a whole (division for certain countries in Europe and Asia);
- Guideness on Developing IP policy for Universities and R&D Organizations (WIPO, Geneva);
- “Model IP Policy for Universities and Research Institutions in Countries in Transition”, Presentation of Mr. Michal Svantner, Director, Division for Certain Countries in Europe and Asia (WIPO, Geneva, 2011);
- Model IP Policy for universities and research institutions (division for certain countries in Europe and Asia);

The experiences of the Bournemouth University, King's College London, Oxford Brookes University, University of California, University of Cambridge, University of Debrecen, University of Glasgow, University of Oxford, and University of Plymouth were taken into account in the last document.

2.5 The application of the mentioned documents in practice is possible only by taking into account the national legislation and features during the formation of innovation policy, the document of which is approached differently by each country, for example:

- For Finland: the high level of the diversification of the economy is characteristic;
- For France: the establishment of the smaller technological companies is characteristic;
- For the USA: the encouragement of the restructurisation of the national economy is characteristic;

- The innovation policy in Azerbaijan actively develops, prioritising the prosperity of the non-oil sector, as well as the advancement, modernisation, and diversification of the structure of the economy (“Azerbaijan 2020: Look into the future” Development Concept”, Division Four: Towards a highly competitive economy).

Summary: Before showing the opportunities for organising the IP management at Azerbaijan universities and scientific-research institutions, let us take a look at the overall situation of the innovations and IP in Azerbaijan based on the data of the “The Global Competitiveness Index” by the World Economic Forum, as well as the “The Global Innovation Index”.

II. The situation of the innovation policy in Azerbaijan and comparative analysis of the universities and scientific-research institutions in the IP field

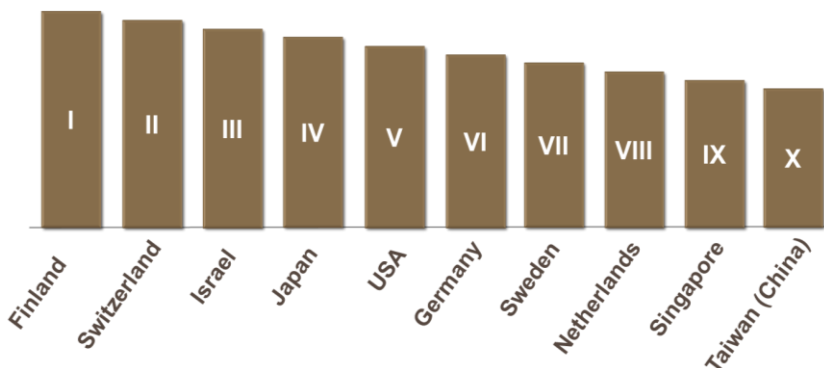
1.

The Global Competitiveness Index (2013-2014), (2014-2015) and (2015-2016) Rankings

**“The Global Competitiveness Report 2015-2016” by the World Economic Forum (Davos)
(Azerbaijan is ranked at 40th out of 140
competitive countries- the leader of the CIS
region)**

The Global Competitiveness Index: 2014-2015

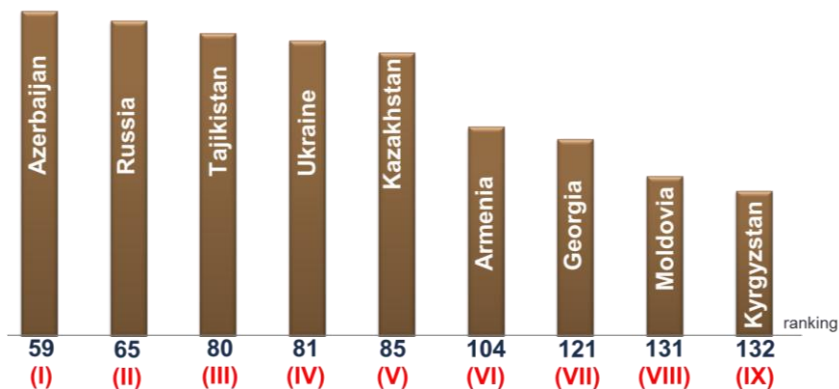
I. Top 10 countries in the world according to the “Innovation” pillar



Note. Research has been done on the basis of 113 indicator parameters, 12 pillars.

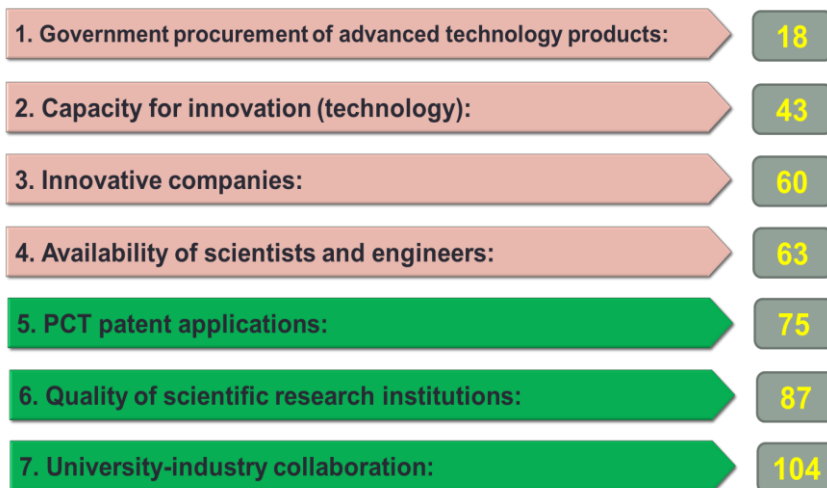
The Global Competitiveness Index: 2014-2015

II. The standings of countries in CIS region (report made for 9 countries) according to the “Innovation” pillar

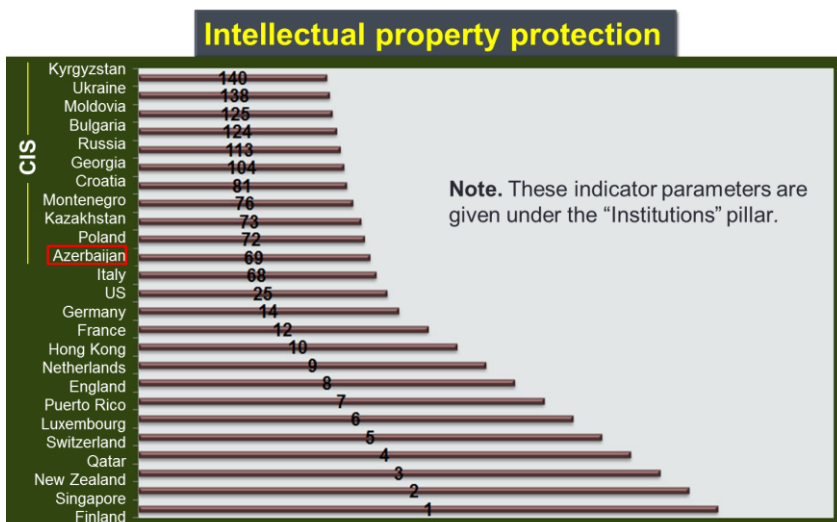


The Global Competitiveness Index: 2015-2016

III. The ranking of Azerbaijan based on the parameters of “Innovation” pillar



The Global Competitiveness Index: 2013-2014



2.

THE GLOBAL INNOVATION INDEX 2014

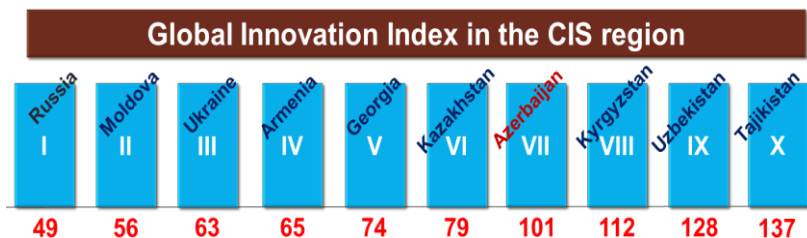
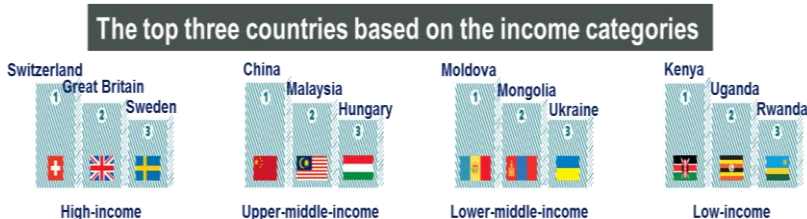
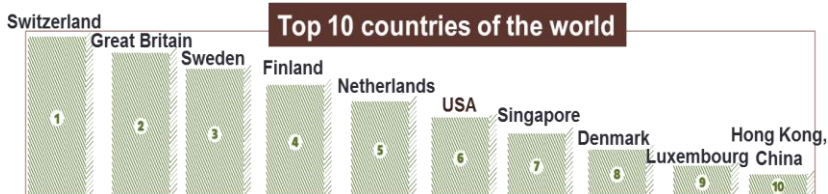
INSEAD
The Business School
for the World®



JOHNSON
Cornell University



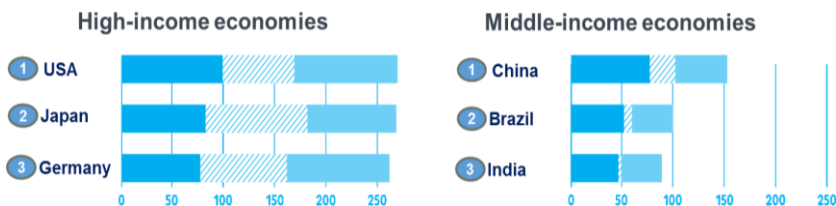
Source: www.globalinnovationindex.org



Innovation quality leaders of the world

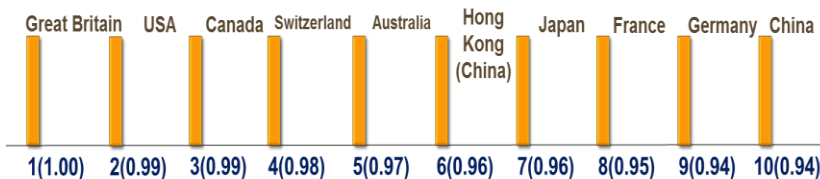


■ The educational quality of universities ■ Patents ■ References, citations in scientific works



I. The quality of education

The quality leaders by taking into account the three top universities in each country (QS system)



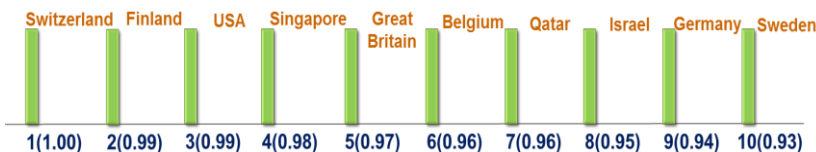
Note. [QS system] – QS World University Rankings (Quacquarelli Symonds methodology: scientific research + career + education + internationalisation)

In the CIS region (based on 3 leading educational institutions)

1. Russia (25th place; 0,83)
2. Kazakhstan (38th place; 0,74)
3. Ukraine (48th place; 0,67)
4. **Azerbaijan (53rd place; 0,63)**
5. Belarus (58th place; 0,60)
6. Armenia (70th place; 0,00)

7. Georgia (70th place; 0,00)
8. Moldova (70th place; 0,00)
9. Tajikistan (70th place; 0,00)

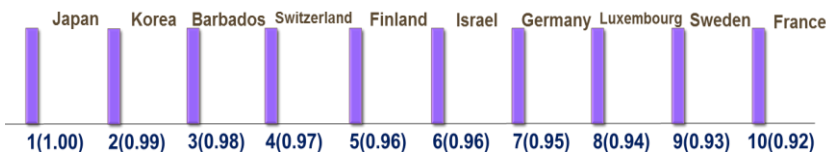
Top 10 countries of the world for the university-industry collaboration in research



In the CIS region

1. Russia (62nd place; 0,55)
2. Ukraine (75th place; 0,45)
3. Kazakhstan (76th place; 0,44)
4. **Azerbaijan (81st place; 0,40)**
5. Armenia (102nd place; 0,24)
6. Moldova (123rd place; 0,08)
7. Georgia (126th place; 0,07)
8. Kyrgyzstan (131st place; 0,04)
9. Tajikistan
10. Uzbekistan

II. Top 10 countries for the number of patent applications filed in minimum three offices (GDP (PPP) per capita)



In the CIS region

1. Moldova (48th place; 0,59)
2. Armenia (53rd place; 0,54)

3. Georgia (56th place; 0,52)
4. Russia (57th place; 0,51)
5. Uzbekistan (85th place; 0,26)
6. **Azerbaijan (89th place; 0,23)**
7. Ukraine (93rd place; 0,19)
8. Belarus (95th place; 0,18)
9. Kazakhstan (98th place; 0,15)
10. Kyrgyzstan (106th place; 0,00)

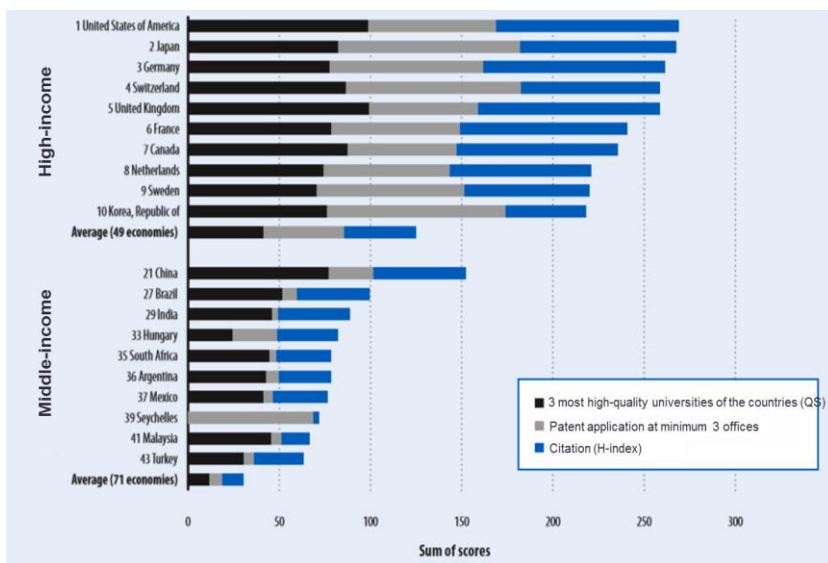
III. Scientific references (citation) in the world–Top 10 countries based on the H-index (1996-2013 | 2013)

Ranking	Country	Number	Point	% rating
1	Germany	740.00	100	0,99
2	Great Britain	851.00	100	0,99
3	US	1.380.00	100	0,99
4	France	681.00	91,90	0,98
5	Canada	658.00	88,74	0,97
6	Japan	635.00	85,58	0,96
7	Italy	588.00	79,12	0,96
8	Netherlands	576.00	77,47	0,95
9	Switzerland	596.00	76,51	0,94
10	Australia	514.00	68,96	0,94
...

Note. *H-index: Hirsch index ($H = h$, a scientist has index h if h of [his/her] N papers have at least h citations each, and the other $(N - h)$ papers have at most h citations each (citation $< h$).*

The CIS region				
Ranking	Country	Number	Point	% rating
I (21)	Russia	325.00	42,99	0,86
II (43)	Ukraine	142.00	17,86	0,70
III (60)	Belarus	106.00	12,91	0,58
IV (62)	Germany	105.00	12,77	0,57
V (82)	Georgia	78.00	9,07	0,42
VI (98)	Moldova	60.00	6,59	0,31
VII (106)	Uzbekistan	53.00	5,63	0,25
VIII (109)	Kazakhstan	52.00	5,49	0,23
IX (116)	Azerbaijan	45.00	4,53	0,18
X (132)	Kyrgyzstan	31.00	2,61	0,06
XI (139)	Tajikistan	23.00	1,51	0,03

Top 10 countries based on the quality of innovation among high and middle-income economies



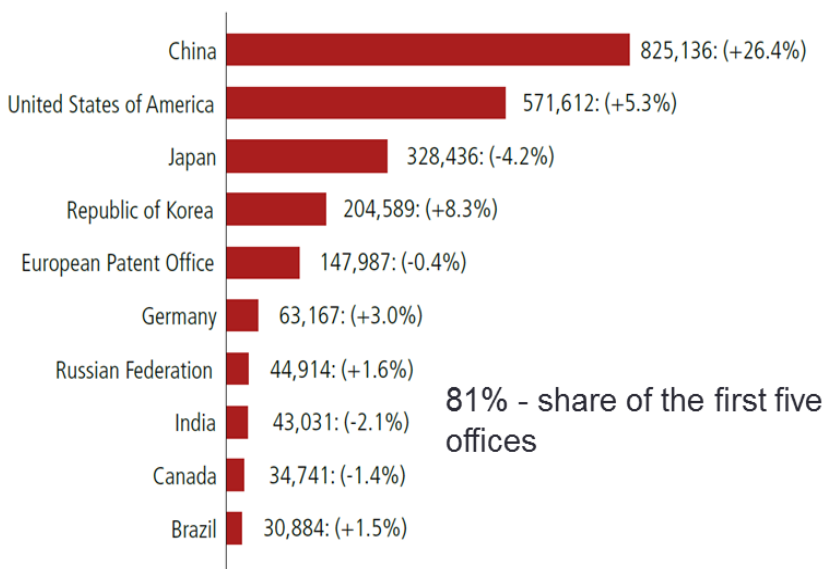
Intellectual property: the situation of the patent field in the world

1.

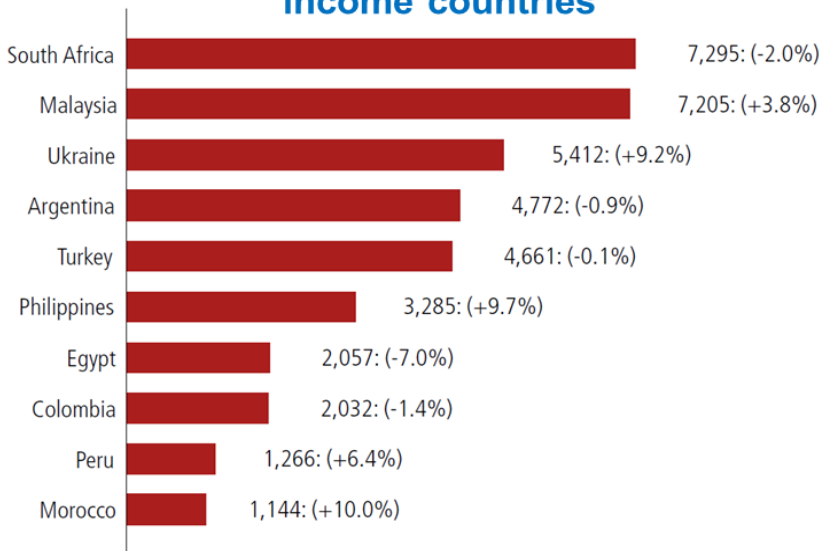
- The growth of the applications concerning the registration of industrial designs is being observed in the world: (the results of 2013: patents – 9%);
- 2,6 mln. patent applications in 2013: 81% belongs to five patent offices (China, the US, Japan, Korea, European Patent Office).

(Source: «WIPO in facts and Figures», 2015; «World Intellectual Property Indicators», 2014).

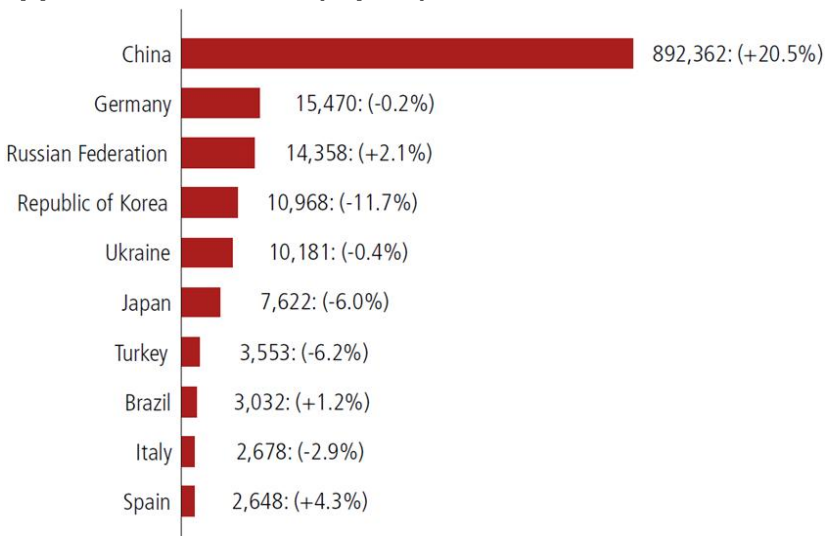
2. Leader offices in the world for patent applications in 2013 (Top 10)



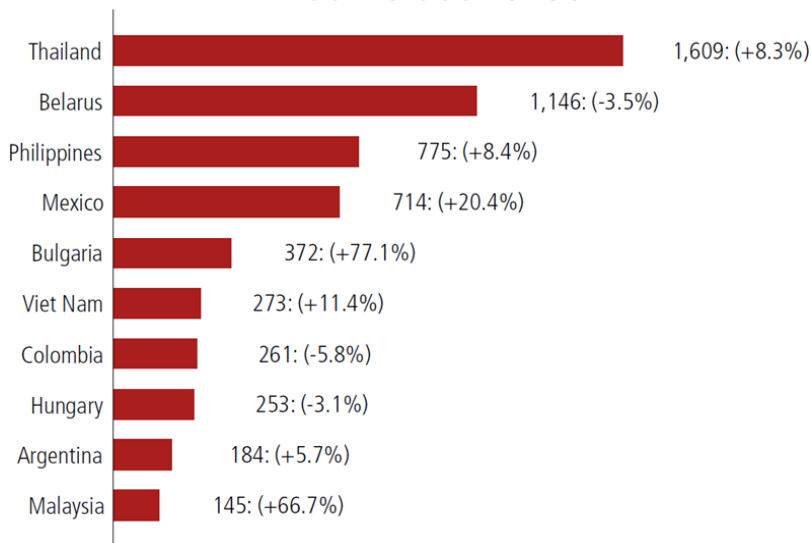
The situation in the middle and low-income countries



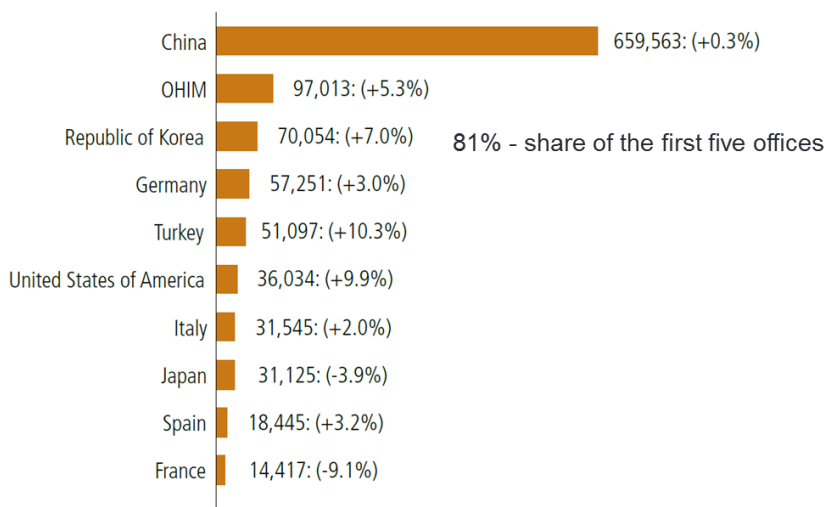
3. Leader offices in the world for the utility model applications in 2013 (top 10)



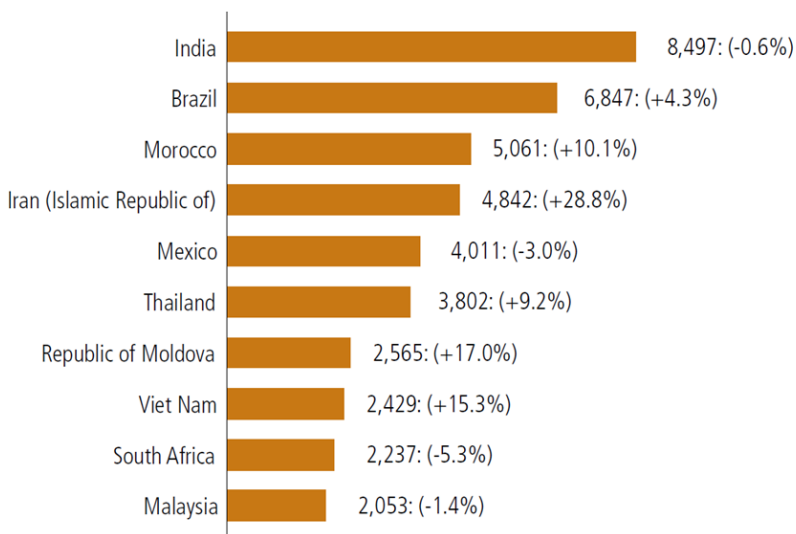
The situation in the middle and low-income countries



4. Leader offices in the world for the industrial design applications in 2013 (top 10)



The situation in the middle and low-income countries



5. The situation in the CIS region in 2013

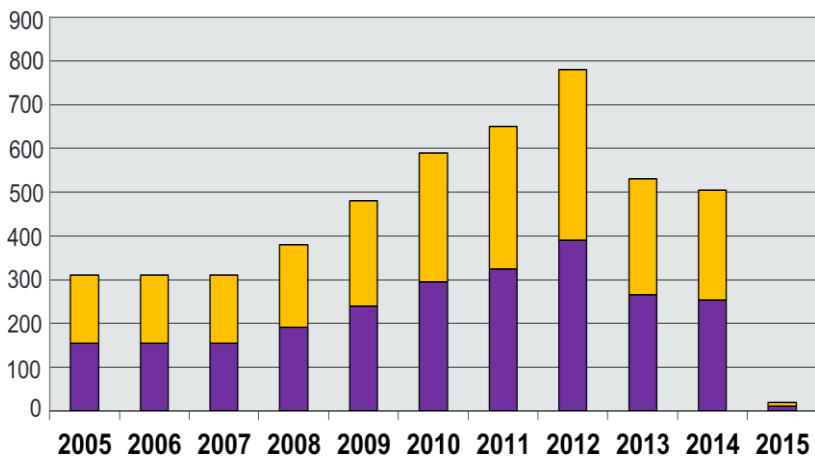
No (By alpha- bet)	Countries	Patent applica- tions	Utility models	Industrial designs	Trademarks
1	Azerbaijan	156	11	1058	14822
2	Armenia	131	41	977	10698
3	Belarus	1034	1146	617	35195
4	Georgia	333	64	1170	11089
5	Kazakhstan	2202	212	357	26296
6	Kyrgyzstan	114	9	885	8552
7	Moldova	96	213	2565	13581
8	Russia	44914	14358	6935	237055
9	Tajikistan	4	-	1728	9476
10	Turkmenistan	-	-	-	6237
11	Ukraine	5412	10181	11960	67053
12	Uzbekistan	557	173	2.429	13246

6. The situation in the CIS region in 2013

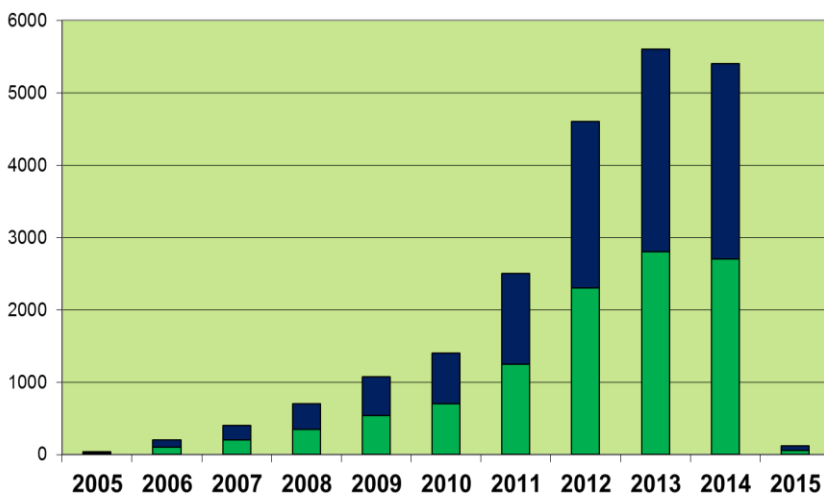
Countries	PCT applications	Ranking	Eurasian applications	Ranking
Russia	1054	1	353	1
Azerbaijan	4	8	33	4
Kazakhstan	22	3	62	3
Armenia	6	6	-	-
Belarus	16	4	95	2
Moldova	2	-	-	-
Georgia	11	5	-	-
Uzbekistan	5	7	-	-
Ukraine	158	2	-	-
Kyrgyzstan	-	9-10	-	-
Turkmenistan	-	9-11	-	-
Tajikistan	-	9-11	-	-

Intellectual property: copyright area

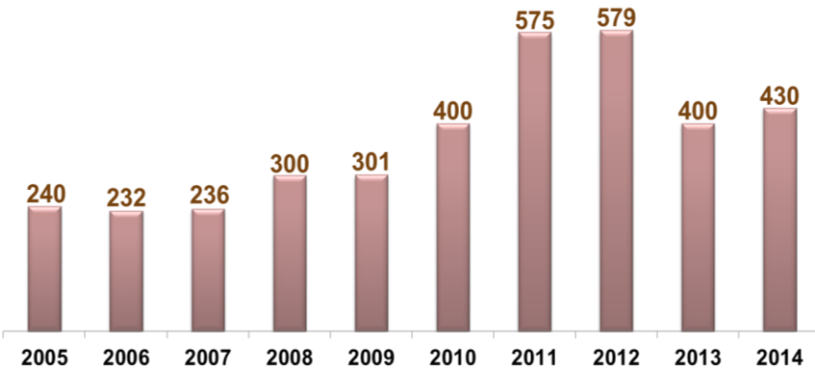
1. 12000 out of 150 000 scientific journals in the world (10%) are in the Thomson Reuters system, and they have high impact factors.
2. The publication of the articles by Azerbaijani authors in the Thomson Reuters system during the last 10 years.



The citations concerning the publication of the articles by Azerbaijani authors in the Thomson Reuters system journals during the last 10 years

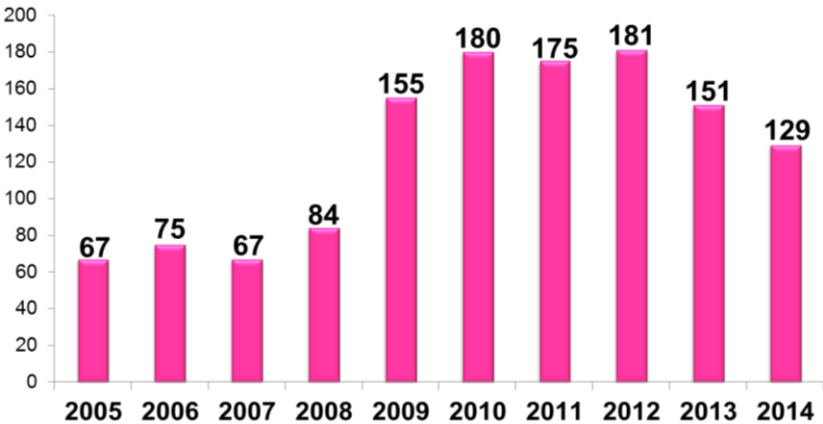


3. The number of the annually published articles of the Azerbaijan National Academy of Sciences (3646)



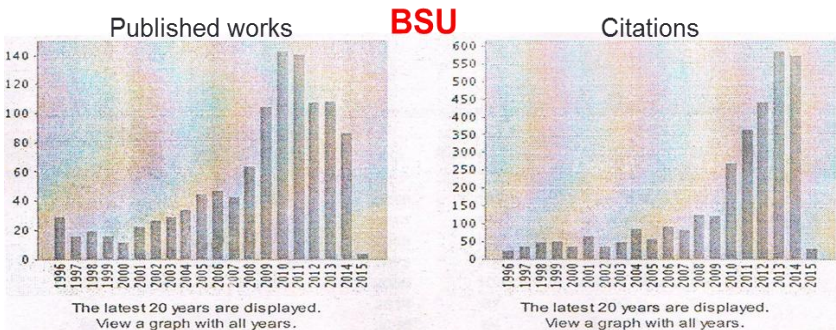
382 articles published during the last 10 years are from South Azerbaijan

4. The number of the annually published articles of the Ministry of Education of the Republic of Azerbaijan (1221)

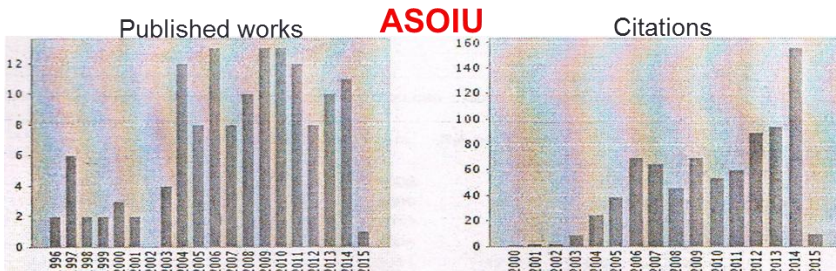


382 articles published during the last 10 years are from South Azerbaijan

5. The situation in three leading universities during the last 20 years

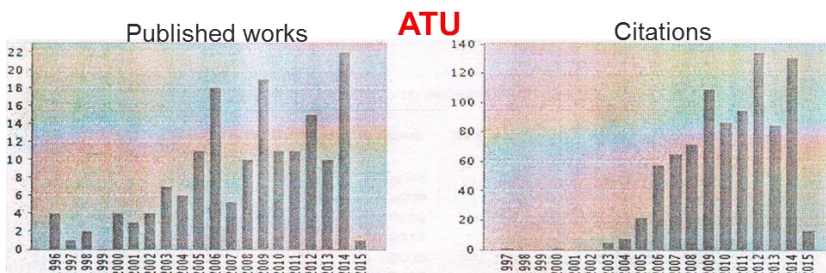


- There was a decrease (56 articles) in the number of the articles published in 2010-2014: 143 → 87
- Specialisations:
 - Maths
 - multidisciplinary
 - physical chemistry
 - chemistry
 - physics
 - biology



- 11 articles in 2014
- Specialisations:
 - physical chemistry
 - computer sciences

- thermodynamics
- automatisisation



- 22 articles in 2014
- Specialisations:
 - physical chemistry
 - mechanics
 - thermodynamics

6. Organisation of the IP policy at universities and scientific-research institutions.

6.1. Let us mention important events below:

- ✓ The creation of the copyright and IP department under the Azerbaijan National Academy of Sciences;
- ✓ The creation of the Center on the Technology transfer and commercialisation of intellectual activity results at Economic University;
- ✓ Joining of the Ministry of Education to the Thomson-Reuters system provided that ANAS institutions have to be given the right to get access to it.

6.2. Generally, although Azerbaijani Universities have a high market potential, they have not made a policy in the IP field yet, have not sufficiently joined global networks, world's trade markets, services, innovations

and scientific-research works. Besides, they do not considerably use the main tools supporting the commercialisation of the intellectual activity results, such as Enterprise Europa Network, Framework Programmer (FP7), Competitiveness and Innovation Framework Programmer, Framework Programme 7 for Research and Innovation Horizon 2020.

For universities, it is not enough to own certain innovative infrastructure and relevant IP professionals (although these are also important parts), the main thing is the understanding of the IP policy formation and the university management should directly stimulate this process. If the initiative of the IP policy formation is only suggested by the inventors of the result of the intellectual activity, or the persons dealing with legal protection, in that case, universities will always be in “catch-up mode”.

6.3. Having said that, the necessary legal framework has already been created: according to the Law on “Science”, universities, ANAS, and its scientific-research entities are given the status of public legal entities and unlike the previous times when state funding allocated for property and research belonged to the government, now they can buy them for their own use and use for their needs according to their charter.

Conclusion: Today the IP policy formation is not about following the trend, it is vital necessity for the development of higher education institutions.

III. HOW TO ORGANISE THE ACTIVITY CONCERNING THE IP POLICY FORMATION?

For this purpose, it is important:

1. The appointment of the responsible person (provisionally coordinator) at the coordination place, or establishment of the IP division.

1.1. The aim of the coordinator – the formation of the IP culture, the spread of information on the IP at the university, executive disposal regarding IP issues.

1.2. Resource bases of the coordinator – national documents concerning IP (Agency has made this compilation).

1.3. Necessary requirements for the coordinator – the creation of the close relations with national IP organisations (examples exist).

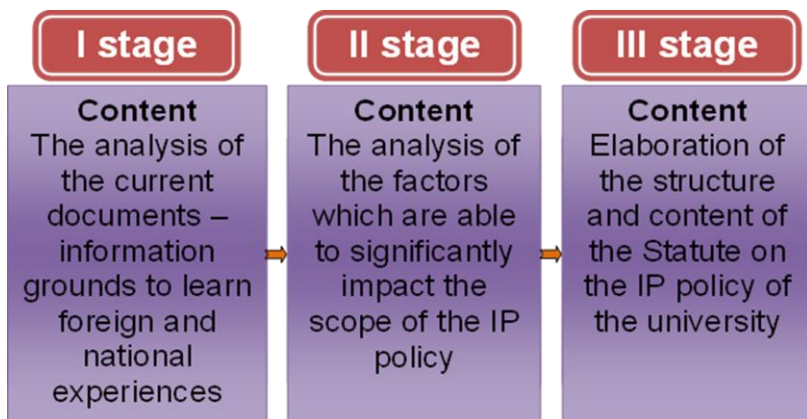
1.4. The support for the coordinator:

a) Training kits and courses of the WIPO;

b) National training centers (for example, Smart-Class of the Enforcement Center on IP Rights under the Agency, as well as online training programs). The main document: WIPO University Initiative.

2. The preparation of the “Statute on the IP policy” for the specific higher education institution.

2.1. The preparation of the Statute on the IP policy combines three stages, but the “Road map” of the IP management (the step-by-step process of the adoption of the administrative decisions) enables the selection of a more effective strategy.



Comments

I stage

a) Main documents: “Model IP Policy for Universities and Research Institutions – WIPO”.

Additionally, it is recommended to check the experiences the following institutions:

- Stanford, Princeton, Yale Universities;
- The Australian National University;
- University of Cologne (Germany), University of Zurich (Switzerland);
- MSU, SPBU, UrFU, The National Research University Higher School of Economics etc.

[These materials have free Internet access].

b) The analysis of the provisions of the IP Policy and WIPO recommendations give an opportunity to mention the key directions below:

- The establishment of the legal protection of the results of the intellectual activity;
- Use of the result of the intellectual activity;
- Disposal of the rights to the result of the intellectual activity;

- Distribution of the revenue arising from the use of the results of the intellectual activity;
- The solution to the conflict situations etc.

II Stage

Main factors:

- innovation policy of the state;
- requirements of the national legislation;
- main purposes and duties of the university (the economic situation in the country, as well as legal and organisational features of the specific university, are taken into consideration);
- real opportunities for the implementation of the IP policy (finance, human resources, organisational and other resources, as well as the innovation process and the encouragement system for the participants of the IP policy implementation).

III stage

The following issues have to be reflected according to the foreign experience and WIPO recommendations:

- policy area (IP objects, as well as rights owners);
- legal issues concerning the status of the researchers;
- foreign sponsorship, cooperation with the third persons on the scientific research;
- Right to property to the IP;
- open data, the use and protection of the IP;
- distribution of the revenues;
- conflict of interest and confidentiality.

We will stand on more substantive parts of the Statute on the IP policy.

3. IP objects created at universities and rights to them.

3.1. IP has been defined in the following way in the Model IP Policy:

“Intellectual Property” means inventions, technologies, developments, improvements, materials, compounds, processes and all other research results and tangible research properties, including software and other copyrighted works.

3.2. The Intellectual Property right has been defined in the following way:

“Intellectual Property Rights” (IP Rights) means ownership and associated rights relating to Intellectual Property, including patents, rights in utility model, plant breeders’ rights, rights in designs, trademarks, topography rights, know-how, trade secrets and all other intellectual or industrial property rights as well as copyrights, either registered or unregistered and including applications or rights to apply for them and together with all extensions and renewals of them, and in each and every case all rights or forms of protection having equivalent or similar effect anywhere in the world.

3.3. The copyrighted work is defined in the following way:

“Copyrighted works” means literary, scientific and art works, including academic publications, scholarly books, articles, lectures, musical compositions, films, presentations and other materials or works other than software, which qualify for protection under the copyright law.

Results:

a) After taking a look at the aforementioned definitions it becomes known that personal non-property

rights have been excluded, as these rights are inseparable under intellectual property objects they have been considered, and belong to the creator of the IP object.

b) Software, which has been separately viewed under the IP together with industrial designs and copyright objects, has been excluded from the definition of copyrighted works.

c) IP and Copyright – objects (copyrighted works) has been introduced as tangible ones. But the IP itself is intangible.

4. The possible owners of the IP created at universities and right to those objects.

4.1. It has been traditionally accepted to differentiate four categories of persons at universities:

a) The university personnel (full-time or substitute), including professors (teachers), scientific and technical staff, administrative, academic-related and assistant staff, as well as student employees.

b) Learners, in other words, students, aspirants, PhD students, degree candidates, or lecture attendants.

c) The contract-based participants of the scientific-research and educational projects of the university.

d) Contractors responsible for contractor agreements, research and development contracts aiming to create intellectual activity results.

4.2. Two categories of claimants intending to get IP rights have been shown in the “Model Statute” – researchers and visiting researchers:

“Researcher” means:

a) persons employed by the Institute, including student employees and technical staff;

b) students, including graduate and postgraduate students of the Institute;

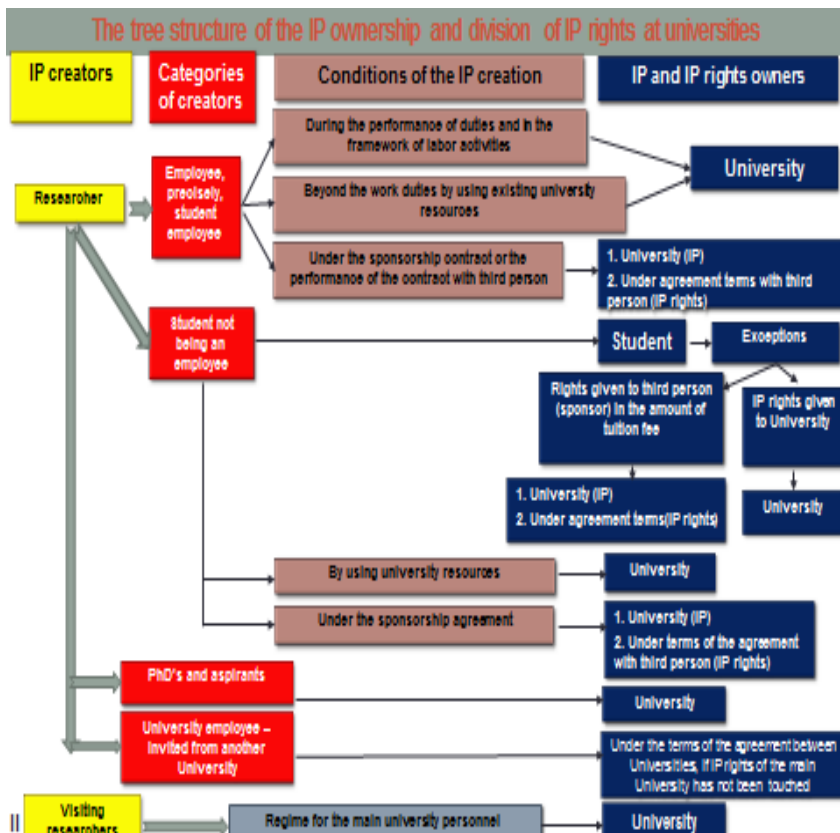
c) any persons, including visiting scientists (persons who use the Institute resources and who perform any research task at the Institute or otherwise participate in any research project administered by the Institute, including those funded by external sponsors).

“Visiting Researcher” means individuals having an association with the Institute without being either employees or students. “Visiting Researchers” includes academic visitors, individuals with honorary appointments in the Institute and emeritus staff.

Results

a) According to the aforementioned information, it becomes known that all four traditional categories of persons of the university are fall under the “researcher” notion.

b) The new category is considered “visiting researchers”.



Additional exception to copyright: all the rights to copyrighted Work belong to creators without being dependent of the use of University Resources, its Proceedings, experience etc, irrespective of whether the work is created in the course of research or otherwise. Exceptions cover the copyrighted Works which are created on the basis of the performance of the agreement on the conduct of research under the sponsorship agreements or other ones with third

5. The conflict of interest relating to the IP objects created at university.

5.1. Right division tree “excludes” the possible conflict of interest.

5.2. The conflicts during the creation of the IP objects are defined on the basis of the specificity of the creativity character of the IP, non-complete excludability of the results and concreteness.

5.3. Conflicts during the transfer of the IP objects is related to the complexity of the adequate assessment of the result of the intellectual activity.

5.4. Conflicts during the transfer of the IP objects ΘM is linked with the contrast among privileges, the concrete character of the business, and the non-material nature and replicability of IP objects.

Summary results

1. The Statute on the IP policy adopted at the university not only ensures legal clarity in the IP field (property rights, protection, IP rights enforcement, and collection and management of the IP portfolio), but also aims the commercialisation of the IP (Management of IP portfolio and fair distribution of the economic advantages obtained from the application of the result of the intellectual activity among related persons), this, as a result, supports and stimulates the result of the intellectual activity for the sake of welfare of the society.
2. The Statute on the IP policy is a new approach to the conduct of the Research and Technical Development (RTD), new principles and regulations of their presentation as a result of the intellectual activity objectively protected by the IP, and is attributed to all the IP (the beginning of the activity of the Statute is highlighted) and researchers (provided that there is no agreement for the opposite case).
3. It is required to take necessary measures, aiming to give information (obligatory procedure) about the Statute on the IP Policy provisions to the senior management supervising paid workers (employment

contracts), as well as all other categories of researchers or persons authorised to conclude agreements for the conduct of work on behalf of the university, and include positions on the power of the Statute on the IP Policy in the relevant agreements (labor contract related to the conduct of scientific-research work etc.). Additionally, this position remains in force even after those persons finish their activities at the university.