

## First Release

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In 2021, the number of patent applications submitted to the State Intellectual Property Office (hereinafter referred to as: SIPO) amounted to 88, of which 77 were filed by resident and 11 by non-resident applicants. Out of the total residents, 68.8% were submitted by natural persons, and 31.2% by legal entities, while, concerning the non-resident applicants, natural persons submitted 72.7% and legal entities 27.3% of applications.

#### The most applications related to mechanical engineering

As regards the fields of technology, the highest share of patent applications in 2021 is related to Mechanical engineering (37.0%) and Chemistry (30.1%), while the lowest number related to Instruments (9.2%).

The International Patent Classification (hereinafter referred to as: IPC) provides the identification of the technology base of patents as well as the sector in which they will probably be applied. According to the IPC codes, the highest share of patent applications in 2021 were recorded in section B Performing operations; transporting (28.4%) and the lowest one in section D Textiles; paper (1.2%).

In 2021, the total number of patents granted in the national procedure amounted to 58. Out of that number, there were 51 patents of resident and 7 of non-resident applicants. Out of the total number of patents granted in the national procedure, 66.7% were invented by natural persons and 33.3% by legal entities. Concerning the non-resident applicants, 85.7% of patents granted were invented by legal entities and 14.3% by natural persons.

### The most granted patents were related to mechanical engineering

The highest share of granted patents in 2021 according to the field of technology was related to Mechanical engineering (35.8%), followed by Instruments (17.5%) and Chemistry (17.5%), while the lowest one was related to Electrical engineering (13.1%).

According to the IPC codes, the highest share of granted patents in 2021 was related to section A Human necessities (25.9%). The lowest share was related to section C Chemistry; metallurgy (3.4%), while there were no granted patents in section D Textiles; paper.

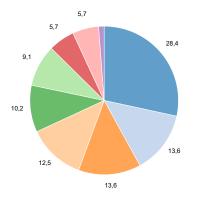
In 2021, there were 12 183 valid patents in the Republic of Croatia.

### Two thirds of patent applications and more than three quarters of granted patents referred to resident applicants from Adriatic Croatia and the City of Zagreb

In 2021, out of the total number of patent applications of resident applicants, 33.8% were filed by applicants from Adriatic Croatia and 32.5% by applicants from the City of Zagreb.

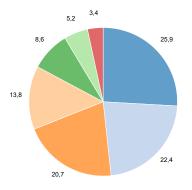
Concerning granted patents in 2021, 39.2% of applicants came from Adriatic Croatia and 37.3 % from the City of Zagreb.

### G-1. PATENT APPLICATIONS IN NATIONAL PROCEDURE, ACCORDING TO IPC CODES, 2021



B Performing operati...
G Physics, %
H Electricity, %
C Chemistry, metallu...
D Textiles, paper, %

### G-2. PATENTS GRANTED IN NATIONAL PROCEDURE, ACCORDING TO IPC CODES, 2021



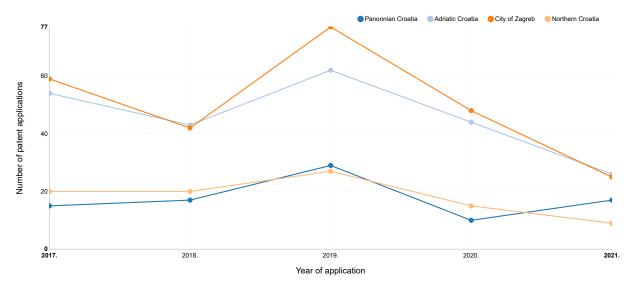
A Human necessities,...
B Performing operati...
H Electricity, %
G Physics, %
E Fixed construction...

# 1 PATENT APPLICATIONS IN NATIONAL PROCEDURE, 2017 – 2021

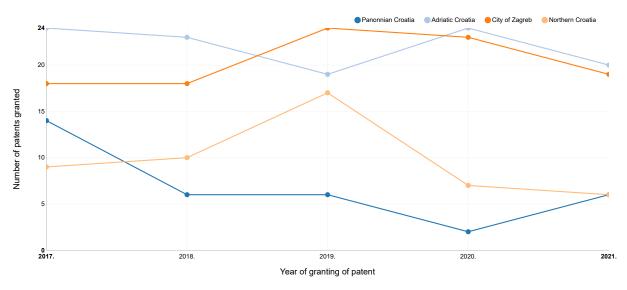
	2017	2018	2019	2020	2021
Total	159	136	211	129	88
Applications filed by resident applicants	148	121	195	117	77
Natural persons	122	102	137	77	53
Legal entities	26	19	57	40	24
Applications filed by non-resident applicants	11	15	16	12	11
Natural persons	3	9	10	9	8
Legal entities	8	6	6	3	3
By field of technology <sup>1)</sup>					
Electrical engineering	31	39	54	27	27
Instruments	16	24	59	33	16
Chemistry	85	61	78	57	52
Mechanical engineering	104	80	134	74	64
Other fields	55	46	76	46	14
By IPC code					
A Human necessities	46	35	58	37	11
B Performing operations, transporting	29	24	43	34	25
C Chemistry, metallurgy	4	6	13	7	5
D Textiles, paper	-	-	1	-	1
E Fixed constructions	16	15	21	9	8
F Mechanical engineering, lighting, heating, weapons, blasting	28	28	27	14	12
G Physics	13	14	21	16	12
H Electricity	14	10	24	10	9
Unknown	9	4	3	2	5

1) This is in accordance with the WIPO International Patent Classification concordance table. The sum of patents by fields of technology may be higher than the total number of patents because more than one IPC code may be assigned to a single patent.

## G-3. PATENT APPLICATIONS OF RESIDENT APPLICANTS IN NATIONAL PROCEDURE, AT HR\_NUTS 2021 - HR NUTS 2<sup>1)</sup>, 2017 - 2021



1) The data in the graph are recalculated for the whole time series according to HR\_NUTS 2021. - HR NUTS 2 (NN, No. 125/19).





1) The data in the graph are recalculated for the whole time series according to HR\_NUTS 2021. - HR NUTS 2 (NN, No. 125/19).

## 2 PATENTS GRANTED IN NATIONAL PROCEDURE, 2017 - 2021

	2017	2018	2019	2020	2021
Total	86	71	83	67	58
Resident applicants	65	57	66	56	51
Natural persons	52	48	51	45	34
Legal entities	13	9	15	11	17
Non-resident applicants	21	14	17	11	7
Natural persons	4	-	2	1	1
Legal entities	17	14	15	10	6
By field of technology <sup>1)</sup>					
Electrical engineering	12	10	18	15	18
Instruments	14	10	10	9	24
Chemistry	110	84	145	85	24
Mechanical engineering	62	48	40	56	49
Other fields	33	25	43	32	22
By IPC code					
A Human necessities	32	21	24	21	15
B Performing operations, transporting	18	13	16	10	13
C Chemistry, metallurgy	7	5	10	5	2
D Textiles, paper	-	-	2	-	-
E Fixed constructions	8	9	8	11	3
F Mechanical engineering, lighting, heating, weapons, blasting	8	10	8	11	12
G Physics	9	9	8	4	5
H Electricity	3	4	7	5	8
Unknown	1	1	-	-	-

1) This is in accordance with the WIPO International Patent Classification concordance table. The sum of patents by fields of technology may be higher than the total number of patents because more than one IPC code may be assigned to a single patent.

# 3 VALID PATENTS IN REPUBLIC OF CROATIA, 2017 - 2021

	2017	2018	2019	2020	2021
Total	8.201	9.260	10.365	11.335	12.183
Patents <sup>1)</sup>	7.845	8.945	10.060	11.041	11.873
Consensual patents	356	315	305	294	283
Utility model	-	-	-	-	27

1) Including European patents validated in the Republic of Croatia.

## **NOTES ON METHODOLOGY**

### Data sources

The data are the result of the processing of data taken over from SIPO. It is a state administration body with responsibilities in the field of the protection of intellectual property rights. SIPO carries out procedures for granting industrial property rights (patents, trademarks, industrial designs, geographical indications and designations of origin, topographies of semiconductor products) and performs the accompanying professional and legislative activity.

The data have been compiled according to the defined set of tables and processed by applying the required methodology.

### Objectives of the survey and coverage

The methodological basis for the implementation of the survey is the internationally acknowledged standard, which was set up and published in the OECD Patent Statistics Manual.

The patent statistics provide information on the success of the research, development and innovation activity in selected fields of technology. The number of patents is one of the measures of the inventive activity of a country that, in addition, displays the capacity to exploit the knowledge and translate it into potential economic gains. The International Patent Classification (IPC) enables the classification of patent applications and granted patents into the selected fields of technology. The patents are classified, according to the technical subject matter of the invention, into respective classes or subclasses. The Classification includes eight fields of technology (marked with letters A to H), broken down into subfields further divided into classes and subclasses.

The data presented in this First Release encompasses patent applications submitted to SIPO and patents granted by SIPO in the national.

The data are presented at the level of the Republic of Croatia, while G3 and G4 graphs present data for 5-year time series at the HR\_NUTS 2021. – HR NUTS 2 level, according to the new National Classification of Statistical Regions (HR\_NUTS 2021.; NN, No. 125/19).

### **Definitions and explanations**

The definitions covering the patent statistics area are based on the international methodology – the OECD Patent Statistics Manual 2009, issued by OECD, Paris, 2009.

**A patent** is an exclusive right granted for an invention that offers a new technical solution to a problem. It is granted for inventions related to a product, procedure or application. The patent provides the exclusive right to the owner to make, use, distribute or sell the invention protected by the patent during a limited, generally 20 years from the filing date of the application. On expiration of this time, the patent is made a public good, available for public use.

The patent does not protect an abstract concept but an actual technical solution to a problem. The basic conditions for every invention that have to be fulfilled for granting of the patent are that it is new, that it involves an inventive step and that it is eligible for industrial application (that is, practical industrial applicability).

Patents are a territorial right, which means that they are valid only in the territory of a country where they were granted. Patents are granted by an authorised body, on the basis of the examination of the patent application that describes the invention. The authorised body in the Republic of Croatia is SIPO.

The patent granting procedure is instituted by filing the **patent application** and carried out in line with the Patent Act and Patent Regulations. It consists of two main phases, the formal examination of the text of the application prior to its publication in the SIPO official gazette and the examination after the publication. The procedure may result in the **grant of a patent** for a proposed invention, provided that the prescribed requirements are complied with, or in the refusal of a request for the grant of a patent, if such requirements are not complied with.

The patent applications are for the purpose of this First Release counted in a year when they were submitted to the SIPO, while the granted applications are counted in a year when they were granted by the SIPO.

**Consensual patent** is a special form of the patent protection in the Republic of Croatia. Its main characteristic is that it is granted without a substantive examination of the patent application, that is, on the basis of the public consensus, if no opposition to the grant is filed. The term of the consensual patent is no more than ten years.

**Utility model** is a form of invention protection that is registered without a substantive examination procedure of the patentability condition. The utility model can only protect products that do not belong in the field of biotechnology and that are not chemical or pharmaceutical substances. In addition, inventions whose commercial exploitation would be contrary to public policy or morality cannot be protected. Utility model lasts for 10 years, counting from the date of filing the application.

The process of registering a utility model is faster, cheaper and more suitable for simpler inventions as well as for natural persons and small and medium-sized enterprises, as compared to the procedure of granting a patent.

The definitions and explanations have been taken over from the web site of SIPO www.dziv.hr, where more information is available.

#### Abbreviations

HR_NUTS 2021. – HR NUTS 2	National Classification of Statistical Regions, 2021 version – 2 <sup>nd</sup> level statistical regions
NN	Narodne novine, official gazette of the Republic of Croatia
OECD	Organisation for Economic Co-operation and Development
WIPO	World Intellectual Property Organization

### Symbols

no oc

no occurrence

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