W&B IP Newsletter

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The China-Iceland and China-Egypt Patent Examination Highway (PPH) Pilot Projects to be extended

In order to continue to provide efficient and convenient PPH services to applicants, the China National Intellectual Property Administration and the Intellectual Property Office of Iceland and the Patent Office of Egypt have respectively reached an agreement on the extension of the relevant PPH pilot project. The two PPH pilot projects will be extended for another five years from July 1, 2024 to until June 30, 2029. Among them, the address of the headquarters of the Iceland Intellectual Property Office has been updated in the China-Iceland PPH Guide, and the rest of the content remains unchanged, which will continue to apply to the China-Iceland PPH pilot project. The requirements and procedures for the China-Egypt PPH pilot project will continue to follow the China-Egypt PPH Guide.

The extension of the two PPH pilot projects will facilitate the patent applications of innovative entities to be examined more quickly, so as to better serve scientific and technological innovation and economic development, and will further promote the exchanges and cooperation between China and Iceland and Egypt in the field of intellectual property.

(Source: China Intellectual Property Administration)

Patent Cooperation Treaty (PCT) Advanced Circuit Seminar held in China

Recently, the Patent Cooperation Treaty (PCT) Advanced Circuit Seminar co-sponsored by the China National Intellectual Property Administration (CNIPA) and the World Intellectual Property Organization (WIPO) was successfully held in Tianjin and Hubei.

At the meeting, experts from the CNIPA and the WIPO made a detailed introduction on the latest progress of the PCT system and the use of the practice, and answered the questions raised by the participants, so as to enhance the understanding on the PCT system of relevant innovation entities and service organizations, improve the ability to effectively use the PCT system, and improve the level of PCT application practice.

A total of about 300 representatives attended the meeting, including relevant enterprises, universities, intellectual property service agencies, the Hubei Center and the Tianjin Center of the Patent Examination Cooperation of the Patent Office of the CNIPA, Tianjin Center, and relevant local intellectual property management agencies.

(Source: China Intellectual Property Administration)

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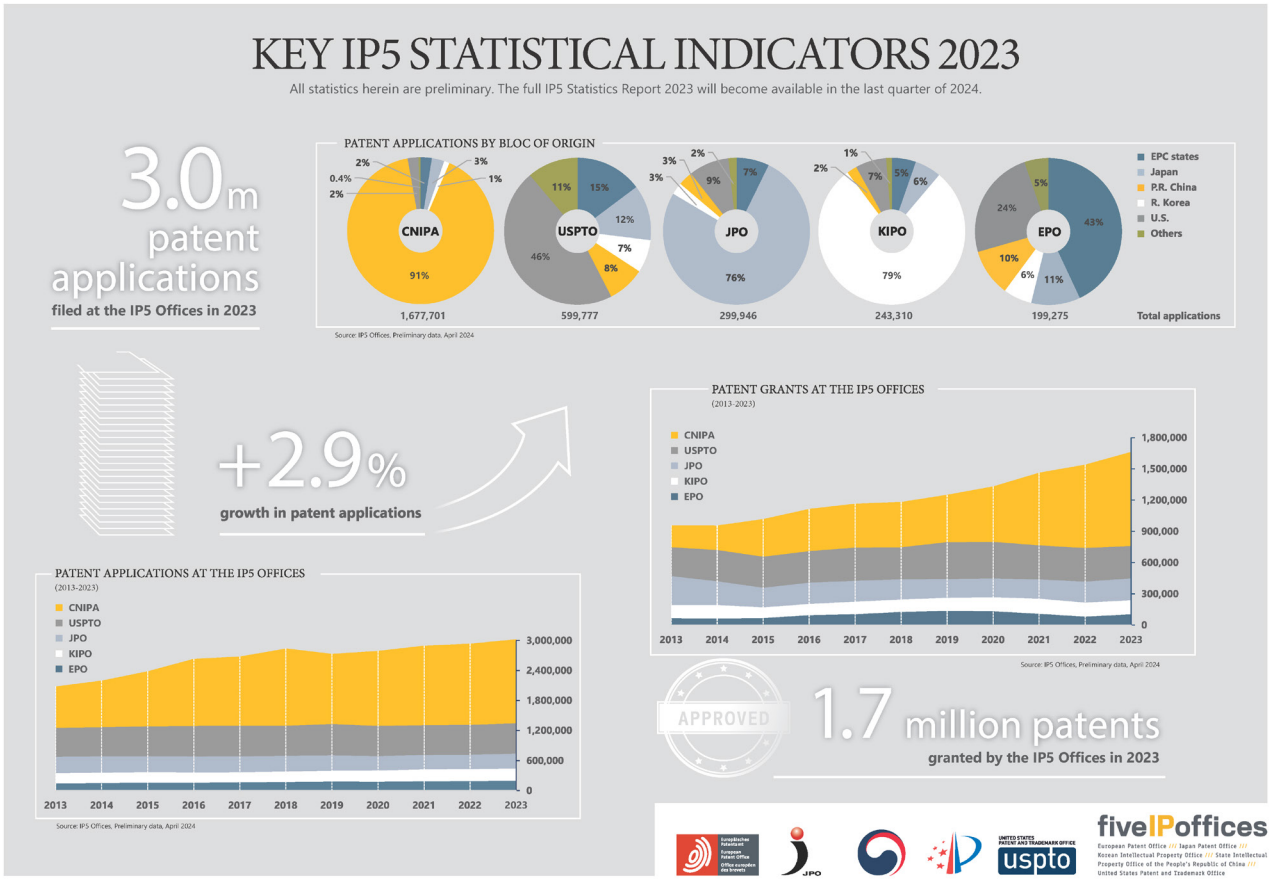
CNIPA releases KEY IP5 STATISTICAL INDICATORS 2023



(Source: China Intellectual Property Administration)

WIPO releases the Patent Landscape Report — Generative Artificial Intelligence

On July 3, local time, the World Intellectual Property Organization released the " Patent Landscape Report — Generative Artificial Intelligence " (the “Report”). The report documents 54,000 GenAI inventions in the decade ending in 2023. According to the Report, China filed the largest number of GenAI patents, far surpassing the United States, South Korea, Japan and India.

A summary of the major findings under the Report is provided below:

An overview of GenAI related patents

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Between 2014 and 2023, 54,000 invention applications related to GenAI were filed, and more than 75,000 scientific articles were published. In 2023 alone, GenAI patent family publications accounted for over 25% of all GenAI patent publications; and papers related to GenAI accounted for over 45% of all papers written during the period. However, presently GenAI patents only account for 6% of all AI patents worldwide.

The top 10 organizations with the most patents in GenAI

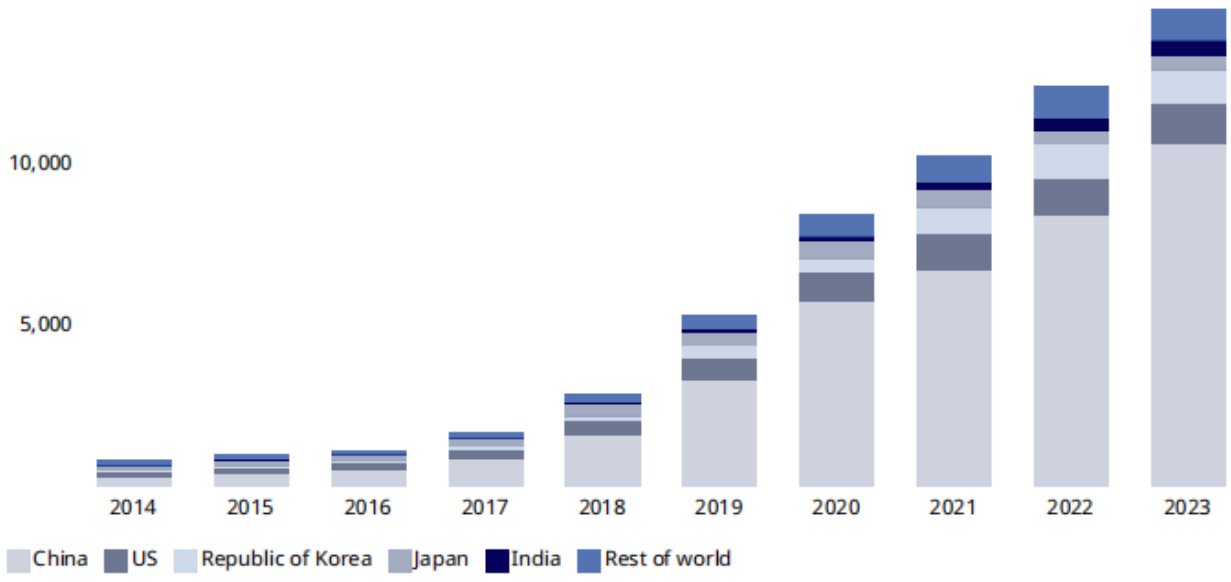
Specifically, they are: Tencent (2,074 inventions), Ping An Insurance Group (1,564), Baidu (1,234), Chinese Academy of Sciences (607), IBM (601), Alibaba Group (571), Samsung Electronics (468), Alphabet (443), ByteDance (418) and Microsoft (377).

Key locations of inventors

China is at the forefront of global patenting activity in GenAI. China was responsible for more than 38,000 patent family publications between 2014 and 2023, based on the inventor addresses published on patents. Since 2017, China has published more patent families in this field every year than all other countries combined.

With a total of around 6,300 patent families between 2014 and 2023, the US is the second most important research location for GenAI. The Asian countries of the Republic of Korea, Japan and India are also important research locations in GenAI, all ranking in the top 5 countries worldwide (third, fourth and fifth respectively) (Figure 16).

Figure 16 Development of GenAI patent families in key inventor locations, 2014–2023



Source: WIPO, based on patent data from EconSight/IFI Claims, Orbit by Questel and PATENTSCOPE, April 2024.

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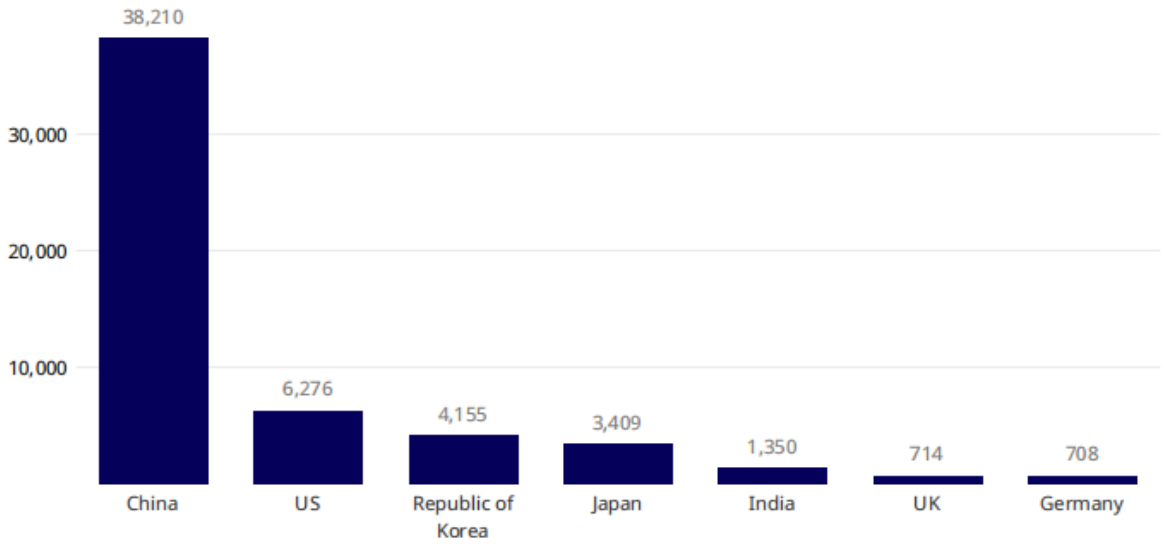
Figure 17 gives an overview of the current Chinese leadership in GenAI research activities. Between 2014 and 2023, China achieved a world share of almost 70% of all patent family publications in GenAI globally (Y-axis). Even more impressive is that China has also reached very high average growth rates of patent family publications (50% per year, X-axis) in that period among the top inventor locations despite its already large GenAI patent portfolio. Only India had even higher growth rates in GenAI patent family publications (56% per year). The Republic of Korea has also achieved high growth rates in their GenAI patent families since 2014. By contrast, patent families from Japan and the UK have only risen by a little more than 10% per year on average.

Figure 17a Country comparison of the number of GenAI-related patent families, 2014–2023



Specific forms and fields of GenAI patents

Image and video data dominated GenAI patents (17,996 inventions), followed by text (13,494) and speech/music (13,480). GenAI patents that use molecular, genetic, and protein data are growing rapidly (1,494 since 2014), with an average annual growth rate of 78% over the past five years.

Table A1 Interdependence between GenAI modes and GenAI models, 2014–2023

	GAN	LLM	VAE	Diffusion models	Autoregressive models	GenAI Total
Image/video	6,802	196	658	363	83	17,996
Text	782	850	245	65	142	13,494
Speech/voice/music	323	267	163	38	92	13,480
3D image models	618	38	72	49	11	3
Molecules/genes/proteins	129	20	147	20	17	1,494
Software/code	176	47	30	6	10	1,340
Other modes	2,281	151	727	121	106	14,270

Note: A large proportion of all GenAI patent families do not fit into any of the five specific core models, as these patents do not contain keywords relating to the specific model used in the patent abstract, claims or title. Hence, the total number of GenAI patent families is much larger than the sum of the five core GenAI models. Patent families can be assigned to more than one mode and/or model.

Source: WIPO, based on patent data from EconSight/IFI Claims, April 2024.

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A wide range of fields covered by GenAI Patents

Specifically, these fields include life sciences (5,346 inventions), document management and publishing (4,976), and more than 2,000 inventions in business solutions, industrial and manufacturing, transportation, security and telecommunications.

Meanwhile, the Report also points out that the emergence of GenAI will have significant impacts on various industries. For example, copyright issues arising from the use of GenAI have been debated in many jurisdictions. In the United States, for example, artists, authors and others have filed lawsuits accusing major AI companies such as OpenAI of using their copyrighted works without permission to train AI systems. Another hotly debated issue, among others, is whether AI inventions can be patented.

(Source: WIPO)