## High-tech hub in Beijing hailed as innovation model

Zhongguancun zone has made marked achievements in developing a successful pioneering intellectual property system

#### By HAN XIUCHENG

Zhongguancun, a high-tech business hub in Beijing, has made pioneering achievements in the creation and demonstration of an intellectual property system over the past 15 years.

It was named a national IP model park in 2003, the only one of its kind approved by the State Council so far.

In the Zhongguancun State Intellectual Property Park, a host of innovative businesses, as well as research and service institutes that capitalize on the patent system, have sprung up, helping to create an IP-friendly culture.

By the end of 2017, local companies had an inventory of 80,600 invention patents, accounting for 64 percent of the total owned by all businesses in the city.

Invention patent applications filed by the companies increased from 1,263 in 2003 to 43,696 in 2017. The patents granted jumped from 968 to 23,167 during the same period.

And the number of valid registered trademarks and copyrights was 204,261 and 216,174 respectively.

To date, more than 40,000 foreign nationals and returned overseas Chinese work in the park	Improved IP and high-value patents support Zhongguancun's transformation and upgrade. By the end of 2017, local companies and industrial alli- ances had par- ticipated in for- mulating 330 international standards and 4,536 national standards and
park	4,536 national standards and
	won 35 top pat-

ent awards in China.

The model park was home to 70 unicorns in 2017, accounting for 43 percent of the country's total. A unicorn refers to a startup company whose valuation has exceeded \$1 billion. Of them, 27 companies that have filed patent applications have been valued to be worth a total of \$207.93 billion.

Zhongguancun boasts an innovation-friendly climate, where the Haidian District People's Court is situated. The Beijing IP Court, which was unveiled at the end of 2014 and is the first of its kind in the country, is also located in the model park.

The Beijing IP Court settled nearly 12,800 cases last year, a surge of more than 135 percent from 5,432 in 2015, accounting for 5.7 percent of the total of Chinese courts nationwide.

The China National Intellectual Property Administration cooperated with the Beijing government to build IP protection centers in Zhongguancun, helping the park create an innovation-friendly climate.

At the forefront of the country in terms of reforms and with advanced innovative ideas, Zhongguancun has created many firsts in exploring

## 80,600 invention patents

were held by companies in the Zhongguancun area by the end of last year

tion of the high-tech enterprise status and reforms covering the property system, IP, business credit and high tech starture' setting listed

high-tech startups' getting listed. More than 20 policies piloted in Zhongguancun have been promoted in other national innovation demonstration zones or even nationwide.

Home to a great number of universities and high-tech companies, Zhongguancun enjoys rich resources in innovation.

Local authorities encourage companies to make full use of the resources and advance their innovation-driven growth strategy, in which the market plays a decisive role in resources allocation.

A series of working mechanisms have been developed to advance IP development at Zhongguancun, including the founding of a special team dedicated to IP promotion.

Officials from CNTPA, who are engaged in processing patent applications, have been invited to local companies and discussed technical issues with researchers.

The authorities have also called for commercialization and industrialization of IP and coordination in protection.

All the efforts have helped to create a culture revolving around innovation in Zhongguancun, with a focus on IP, which is, in turn, a big draw to high-level professionals who are interested in starting their own businesses.

To date, more than 40,000 foreign nationals and returned overseas Chinese work in the park. Of them, more than 1,340 people are included in the national Recruitment Program of Global Experts, accounting for 19 percent of the country's total.

About one-third of equity investment cases in China took place in Zhongguancun last year. Their investment value also accounted for some one-third of the country's total. In the first eight months of this year, 23,000 tech companies were founded in the park, an increase of 24.6 percent year-on-year.

At the park, innovation and entrepreneurship has increasingly become a fashion and lifestyle, with a culture encouraging creation and startups and tolerant of failures.

Zhongguancun's success story shows that creating an IP-friendly culture requires increased awareness of creation and protection and an ecosystem that reveres IP.

IP education and promotion is also indispensable to the culture creation. Only after the culture is immersed in the entire chain of IP creation, protection, use, management and service can it showcase its power and provide vigor to the country's innovation-driven development.



and dance in circles, during the recent Kam Grand Choir Festival in Congjiang county, Guizhou province. Liu CHAOFU / FOR CHINA DAILY

# Dong ethnic villagers gather for grand musical festival

GUIYANG — As warm breezes blow on colorful embroidered attire and silver ornaments, singing voices echo above the drum towers.

The Kam Grand Choir Festival was held recently in Congjiang county in the Qiandongnan Miao and Dong autonomous prefecture in southwestern Guizhou province.

The three-day event featured grand choirs and singing competitions along the riverside, along with many traditional festive activities in different Dong villages.

The Kam Grand Choir is a type of polyphonic folk singing performed without musical instruments or a conductor. Also known as the Grand Song of the Dong, one of China's 55 ethnic minorities, the choir was included in the World Intangible Cultural Heritage List in 2009.

In Dingdong village, more than 1,000 villagers gathered in the public playground during the event for "Cai Ge Tang", a grand spectacle performed as the villagers walk and dance in circles. The spontaneous repertoire lasted for hours.

"Today, on this special occasion, the songs are mostly about how we miss the good old days we spent together as childhood friends, and about our wish to find the love of They are more than just songs for us

- they are ancient nuggets of wisdom

and cultural heritage we would hate to lose."

Liang Xiangtao, a local villager participating in the performance

life," said Liang Xiangtao, 25, one of the local village women singing and dancing in the circle.

Teenagers in Dong villages usually learn to sing the traditional songs before their coming-of-age ceremony at the age of 15, and then sing in groups with members of the same age, Liang said.

According to Liang, since the dialect of the Dong ethnic group lacks written form, many traditions and customs are passed on via the folk songs.

via the folk songs. "My friends and I all left work for this event because we deeply cherish and identify with our cultural heritage," said Liang, who currently works in a family inn miles away from her village.

## Chinese robots exhibited at big pharmacists event

LOS ANGELES — Two Chinese automated robotic models were exhibited at the American Society of Health-System Pharmacists Midyear Clinical Meeting and Exhibition, which concluded at the Anaheim Convention Center in California last week.

in California last week. The two intravenous therapy drug compounding robots, designed and produced by Weibond Technology, complete the compounding of IV drugs and antibiotics in a minute, which has not only raised the accuracy and efficiency of compounding, but also reduced risks of IV drugs harming pharmacists. According to ASHP, Weibond is the first and only exhibitor from China to participate in ASHP meetings and exhibitions over the past four decades. Operational demonstrations were conducted on site to more than 25,000 pharmacy professionals – from around the globe – taking part in the annual gathering.

Liu Baochun, CEO of Weibond Technology, said the research and development of the robot started in 2009, and it went into operation first in Renji Hospital of Shanghai Jiaotong University in 2016. Its processing of ampoules is the first in the world, and the technology has independent intellectual property rights. Liu said.

Mike Storey, a pharmacist at the Nationwide Children's Hospital in Columbus in Ohio State, the United States, was among those showing great interest in the Chinese robot.

"Tve been thinking about coming back home and recording traditional Dong songs," Liang said. According to Liang, although residents are keen on passing on their traditions, young people under her age now know less about the Dong songs as a growing number of them have left for

school or work. "They are more than just songs for us — they are ancient nuggets of wisdom and cultural heritage we would hate to lose," she said.

Richard Watts, a photographer from the United Kingdom, was among the visitors.

Since his first visit to Guizhou in 1994, his interest in the province has grown tremendously. Watts now spends four to five months traveling and taking pictures of ethnic groups in the province each year.

"It's my great passion," he said. For Watts, the ethnic groups' enduring preservation of and passion for ethnic traditions are what keeps bringing him back to Guizhou.

"The essence of them remains unchanged," Watts said.

"Modernity has come to their lives, so they've changed a little bit, but you can still find many traditional elements."

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He told Xinhua that artificial intelligence applications in medical treatment will be the future trend. His hospital has not been equipped with a compounding robot yet, and he was very interested in the Chinese technology.

Storey said there are strict criteria for a medical center to operate such a robot in terms of space and a closed environment. He hoped to discuss cooperation with Chinese partners in this regard.

The ASHP Midyear Clinical Meeting and Exhibition is the largest gathering of pharmacists in the world.

A total of 373 exhibitors worldwide joined the exhibition, sharing technology and other products that are designed to aid pharmacists offering highlevel patient care in hospitals and

health-system settings.

**IP** scene

#### BEIJING Confidence grows in China's IP laws

China has been improving the legal protection of intellectual property, according to a news conference of the State Council Information Office held Tuesday. More patent lawsuits among overseas companies were chosen to be conducted in China. This is a signal of growing confidence in the country's judicial judgment and preference for the Chinese market. said Yang Wu, head of the All-China Patent Attorneys Association. China began to accept patent applications in 1985 and in 2017, the country saw 1.38 million such applications, leading the world for the seventh year. XINHUA

SHANDONG Crafts winners receive honors

Winners of a national craftsmanship competition were announced recently in Qingdao. Of more than 5,580 entries from across the coun try, 56 were honored with Design Stars, including seven rated fivestar creations, the highest award in the category. In addition, judges also rolled out another list of 12 awardees for tradition inheritance, artistic expression, market poten-tial and online popularity. The event, which started in April, aims to preserve traditional craftsman ship and encourages participants to integrate the old crafts into modern creations, organizers said. CCDY.CN

ZHEJIANG

#### Province pledges technology boost

Zhejiang province, China's private business hub, has pledged tens of billions of dollars to drive technology and innovation in the next five years, local authorities said on Monday. The province rolled out 50 measures at a news conference to boost high-tech and internet companies, as well as medical research and development. In the next five years, the provincial, municipal and county-level governments in Zhejiang will spend a total of 120 billion yuan (\$17.42 billion) to achieve the goal, according to Gao Yingzhong, head of the provincial Science and Technology Department. The measures also include increasing the ratio of R&D expenditures in provincial GDP, cultivating leading innovators and increasing patent numbers.

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#### YUNNAN Tea industry receives support



Farmers pick tea leaves at a mountainous tea plantation in Yunnan province. ZHANG SHULU / FOR CHINA DAILY

The provincial government announced policies aimed at promoting the growth of its tea industry at a news conference on Saturday. In developing the sec tor. Yunnan boasts advantages including rich tea tree resources. a well-preserved environment, renowned business brands. a wellestablished industrial foundation se tea cultures in ethni groups. The traditional sector is of significance to advancing agricultural modernization, boosting the rural economy and helping poverty alleviation, local officials said. YUNNAN DAILY

an innovative growth path.

It received strong support from the central government to create a mechanism for researchers to run tech startup companies. It has offered key experiences in recogniThe author is the director of the Intellectual Property Development and Research Center at the China National Intellectual Property Administration. About 1/0 education sessions were held during the annual meeting, covering almost 30 healthcare-related topics.

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### Blockchain technology solution found for vexed wordsmiths

HANGZHOU — Writers publishing their work online can easily be hurt by piracy — and it is hard to safeguard their legal rights due to difficulties in collecting evidence. But an internet court in Hangzhou, East China's Zhejiang province now has a solution.

Thanks to blockchain technology, the integral process of work circulating in cyberspace can be extracted for writers to use as evidence in court.

Writers used to resort to screenshots and downloaded content to use as evidence, which was hard to gain legal recognition as the process was not credible enough, according to Wang Jiangqiao, a judge at the Hangzhou Court of the Internet.

On the other hand, notarial procedures and hiring of professional lawyers pushed up the costs of seeking justice, he said.

But blockchain guarantees that data cannot be tampered with, due to its decentralized and open distributed ledger technology. Therefore, all digital footprints stored in the judicial blockchain system authorship, time of creation, content and evidence of infringement — have legal effect, Wang said. Hangzhou is home to many, if not most, online writers in China. A total of 107 famous online writers have signed contracts to create works in a "writers' village" in the city's Binjiang district.

China has set up three internet courts in Hangzhou, Beijing and Guangzhou to handle internetrelated cases.

The country's 800 million internet users and booming online business have led to a rising number of internet-related disputes.



A judge sits to hear a case at the Hangzhou Court of the Internet in Zhejiang province. The court is the first of its kind in the country. PROVIDED TO CHINA DAILY

#### ANHUI Novel computer

#### system launched

China's first quantum computer control system with independent intellectual property has been launched in Hefei, capital of Anhui province in eastern China, sources with the city's high-tech zone said on Tuesday. The control system was developed by Origin Quantum Computing Technology, a startup that develops and commercializes quantum computers. The essential role of the control system is to provide the precise signals needed for the operation of quantum chips. It can also process feedback information and compile computer programs, according to the company. XINHUA

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