

## Introduction to Qin Zhang



Mr. Qin Zhang was born in Chongqing, China in March 1956. His father was a teacher and vice president of the no. 6 middle and high school of Chongqing, and is now retired. His mother was a chief engineer of Chongqing Institute of Building Constructions, and is now retired. His older brother is a senior architect.

Since 2009, Dr. Qin Zhang has been an executive secretary of China Association for Science and Technology (CAST) that is the largest national scientific non-governmental and non-profit organization in the world, including 200 national level academic societies/associations covering almost all scientific/engineering disciplines and related areas, along with thousands of local member organizations throughout the country from the provincial level to the county level. In CAST, he is in charging of budget, planning, enterprise innovation, international affairs and science ethics. During 2003-2009, he was the deputy commissioner of the State Intellectual Property Office (SIPO) of China. Since 2004, he has been the vice president of the China Intellectual Property Society (CIPS, a member of CAST), and has been the chairman of academic advisory board of CIPS since it was established in 2010. During 1997-2003, he was the director of the municipal Science and Technology Committee of Chongqing (STCC), the fourth direct city of China, where the Intellectual Property Office of Chongqing is under the leadership of STCC. During 1978-1989, he graduated with bachelor degree, master degree and Ph.D. degree in nuclear engineering from Tsinghua University that is the top university in China, in particular in engineering. During 1987 Oct – 1989 Oct, he was a visiting scholar of University of California, Los Angeles and University of Tennessee, focusing on reliability engineering, system safety and expert system. He was a post-doctor at the School of Economics and Management, Tsinghua University during 1990-1991, and was an associate professor at Institute of Nuclear Energy Technology, Tsinghua

University during 1992-1993, and the department manager of China Technology Innovation Corporation and the general manager of Xiamen Technology Innovation Corporation during 1993-1997. Now he is also professors and Ph.D. student advisors of Tsinghua University focusing on nuclear power plant safety, of Beihang University focusing on artificial intelligence, and of Xiamen University focusing on IPR. He is the first inventor of an invention patent granted by SIPO in 2010 August (Patent No.: ZL 2006 8 0055266.X) and an invention patent granted by USPTO in 2012 April (Patent No.: US 8255353 B2). He has published about 70 papers in international academic journals/conferences and Chinese academic journals/conferences.

As a scientist and inventor, his research interests include system reliability analysis, artificial intelligence (in particular the online fault diagnosis, forecast and prediction of large and complex systems such as nuclear power plants, chemical plants, aerospace systems, etc), technological and economical issues of magnet elevated trains, etc. He is applying his patent technology named as DUCG (dynamic uncertain causality graph) in a commercial contract project with Guangdong Nuclear Power Group for constructing an expert system for safe operation of nuclear power plants (contract no.: CNPRI-ST10P005, 5 million RMB). The second phase of the project has nearly finished and the product is being installed in Lingdong nuclear power plant owned by Guangdong Nuclear Power Group.

As a deputy commissioner of SIPO, he was responsible for the budget, macro level regulation, policy research and was the spokesperson of SIPO. He took part in almost all important decisions made by SIPO during that time. He is the key person to motivate, designate, organize and draft the Outline of National Intellectual Property Strategy of China (ONIPSC) that was issued by the State Council of China in 2008 June and is the programmatic IPR document of China till 2020. The formulation of ONIPSC (based on 20 subject studies) takes 3.5 years to accomplish and involves 32 ministries/offices of central government and Supreme Court, as well as thousands of Chinese IPR researchers. He established the inter-ministry joint conference chaired by SIPO, which includes 28 governmental ministries/offices and has been so far the framework to fulfill ONIPSC. He conducted the formulation of the first national annual action plan including 220 projects to fulfill ONIPSC. The national action plan has been renewed every year since then and promoted the development of IPR in China significantly. Representing SIPO, he conducted the annual special IPR protection activities in China and the annual IPR communication week activities in China around April 26, the world IPR day. He conducted the establishment of the 12330 call-free IPR infringement complain system in China. He designed and started the annual investigation of China's software piracy in 2006. So far, this investigation has been done continuously for seven years with his participation and the results are quite different from those reported by BSA. He made a policy to encourage the small and medium sized enterprises to apply for patents in foreign countries through PCT, and so far the PCT applications from China have been growing up rapidly. He used to lead Chinese IPR delegations composed of SIPO, Trade Mark Office of China, Copyright Administration of China, Beijing Higher Court, etc., to visit foreign

countries many times, including USA, Japan, India, Brazil, Korea, UK, Germany, France, Italy, Denmark, Sweden, etc., to explain the real IPR situation and policies of Chinese government and join discussions with the foreign partners in an open attitude. As a representative of SIPO, he also participated in WIPO's international conferences and gave speeches a few times. He has close connections with international non-governmental organizations including American Chamber of Commerce, South Center, The Third World Network, etc.

In recent years, he has published about 10 IPR research papers in the Journal of Intellectual Property that is a core academic IPR journal in China. He wrote a book named as The Basic Theory of IPR, which summarizes his deep thinking about IPR underlining ONIPSC. The 10 chapters of the book includes: (1) The criterion of scientific IPR theory; (2) 20 questions on IPR; (3) The philosophical base of the object of IPR; (4) The economical base of the property of IPR; (5) The basic principles to legislate the property of IPR; (6) The moral right of IPR; (7) The ethic base of IPR; (8) The proposed definition of IPR; (9) The globalization of IPR rules; (10) The self-relied innovation and self-relied IPR. Since 2003, he has often been invited to give lectures on IPR to officials from the national level to county level, to judges/lawyers/attorneys, to enterprise managers and technicians and to university teachers/students, in many places including the auditorium of the central party school and classrooms of universities, through satellite TV and internet, so as to promote public awareness of IPR and better understanding on IPR policies. As the executive secretary of CAST, he works closely with ministries and provincial governments, organizes IPR and technical experts working together to analyze patent information and distribute useful information to various enterprises, universities, institutes and individuals, so that they can protect their inventions, avoid infringement, know the information of the advanced technologies, and promote effect of innovation.