Educational undertaking, in any country, serves politics and economy, and is suited to the State's administrative system and economic policies. The development of intellectual property education in colleges and universities in China, in the light of our political and economic situation, can be roughly divided into the following stages:

In the first two decades after the founding of the People's Republic of China, China established a highly centralized economic system in which the mandatory-plan economy played a dominant role, and the international trade of China was monopolized by the State. Intellectual property had occupied no important status, and even the terms "intellectual property" or "industrial property" were seldom heard in China. In this period, one could hardly talk about intellectual property education in China.

After the Third Plenary Session of the Twelfth Central Committee of the Communist Party of China in 1978, China entered a new stage of taking economic development on a large scale as a central task and carried out the policy of "activating the internal economy and opening to the outside world", marked by the reform in the rural economy, the urban economy, science and technology, the educational and political system and the development of the socialist planned commodity economy. The structure of the commodity economy inevitably calls for an understanding of intellectual property. Increasing international trade and technological exchange requires that persons involved in those areas understand the intellectual property, both its professional and its legal aspects. "The Law of the People's Republic of China on Chinese-Foreign Joint Ventures" in 1979 and other related laws and regulations, cover clearly many aspects of intellectual property, such as patent, know-how, copyright, and trademarks. "The Trademark Law of the People's Republic of China" and "The Patent Law of the People's Republic of China" were promulgated in 1982 and 1984 respectively. The law departments of some universities have accordingly begun to pay more attention to the teaching of intellectual property law. For instance, in Peking University, the law department offered the selective course of "intellectual property law" in 1981; graduate students majoring in intellectual property were first enrolled in 1983. Intellectual property law also appeared in the course of civil law offered by the People's University of China. But these courses were limited to the law departments of very few universities. This was the preparing stage for intellectual property education on a larger scale in China.

The promulgation of "The Patent Law of the People's Republic of China" on March 12, 1984, exerted a tremendous influence on the over-all development of intellectual property education. Since 1985, the selective course of "Introduction to Patents" and other related lectures were offered to undergraduates and graduate students of science and engineering at Peking
University, Fudan University, Central China Engineering Institute, Xi'an Jiaotong University, Shanghai Polytechnical University, Beijing Engineering Institute, Dalian Engineering Institute, Northeast China Engineering Institute and Qinghua University. In 1987, some students who graduated with their science or engineering Bachelor degrees are pursuing their second Bachelor degree in intellectual property at the China People's University. The State Education Commission (SEC), has decided that an intellectual property major shall be set up in the structure of China's higher education. Teaching and research sections in intellectual property have appeared in China People's University and Peking University in succession. The establishment of an Intellectual Property Training Centre has been approved by the State Education Commission (SEC). This Centre will be the base for the training of senior and intermediate personnel and teachers in intellectual property. The Society of China's Universities and colleges in Intellectual Property Research, established in 1985, has also played a positive role in promoting the intellectual property education in universities and colleges in China. In recent years, we have not only sent numbers of young and middle-aged teachers to study or work abroad, but some famous attorneys, professors and scholars were also invited to lecture in China by some universities and colleges. The main characteristic is that intellectual property education, which was hitherto limited to law students, has entered the colleges and institutes of science and engineering. By the end of the first semester of 1987, according to incomplete statistics, there are more than twenty universities and colleges offering an intellectual property course or lectures in series, and thousands of students have attended the course or lectures; more than ten sorts of teaching material have been published or have been compiled, and more than ten graduate students and forty pursuing the second Bachelor degree in intellectual property have been enrolled. In addition, under the training programme of the State Education Commission (SEC), more than three hundred people from universities and colleges were trained to be patent agents or patent managerial personnel. Patent firms, patent teaching and research sections and intellectual property research sections have also been established in many universities and colleges. We can thus predict that the stage of a more extensive popularization, enhancing teaching quality and further perfecting the organization of intellectual property education is imminent.

OBJECTIVES AND SIGNIFICANCE OF INTELLECTUAL PROPERTY EDUCATION IN UNIVERSITIES AND COLLEGES IN CHINA

There are two objectives of intellectual property education in universities and colleges in China, first, to train specialized personnel, second, to popularize intellectual property education. "Specialized personnel" includes patent agents, patent attorneys and teachers of intellectual property who will work for the factories, mines and enterprises, research institutes, universities and colleges, either full time or part time. With regard to the popularization of intellectual property education, several features should be noted:

First, our higher education should be suited to the needs of political and economic development. This requires that the new type of specialized personnel adapt themselves to reform. In this regard, the curricula of universities and colleges should be readjusted gradually, aiming at perfecting the knowledge of university students. Offering intellectual property courses
serves the needs of the present, in particular, for the benefit of students of science and engineering, and it is one of the best ways to develop their intelligence, and enhance legal skills. An investigation report has indicated such courses are well received by students, and are suited to the present needs of students and society.

Secondly, because of our historic background, the patent system in China is quite new. Most production enterprises and research institutes know very little about patent law, the value of technology, or trademark law. Most of the 200,000 students who graduate from colleges and institutes of science and engineering every year will, however, be assigned to factories, mines and other enterprises and scientific research institutes. Intellectual property education for these students will have a long term impact on the development of technology of production enterprises, institutes of science and technology, and on pursuing the patent system in China.

Thirdly, universities and colleges are places where knowledge and technology are highly centralized. More than three quarters of China's personnel of science and technology, and more than half of senior scientists are working at universities and colleges. At the same time universities and colleges are also the cradle of young and promising scientists and experts. By the end of the first half of 1987, of all the number of patent applications and grants of patent, the proportion granted to universities and colleges is up 10%. Since the promulgation of the Patent Law of China, 44.4% of patents granted are from universities and colleges. It is very important for promoting patent undertaking, technological exchange creativity, to popularize intellectual property education in universities and colleges, to make the teachers and students aware of the legal protection of intellectual property, to make them understand the methods and procedures of patent application, to arouse their thinking, to stimulate their initiative of creation and invention and to learn to use patent documentation.

Finally, the popularization of intellectual property will lay a very good foundation for providing society with personnel specialized in this field. In the past, this sort of personnel used to be mainly those who graduated from colleges and institutes of science and technology, including students. This is also likely to be the case in the future.

INTELLECTUAL PROPERTY EDUCATION IN UNIVERSITIES AND COLLEGES IN CHINA - ITS CONTENTS, METHODOLOGY AND ORGANIZATION

The contents and methods of intellectual property education vary with the different requirements for personnel in various universities and colleges. Personnel specialized in intellectual property law will be mainly the graduate students majoring in law trained, for example, at Peking University, China People's University and other institutes of political science and law. They will systematically study basic and special courses of law and intellectual property. To train patent examiners, patent agents and patent attorneys, and other patent managerial personnel, we choose people who graduated from colleges and institutes of science and engineering to study law, or choose teachers of science and engineering or scientists and technicians in-service to attend short-term training courses. The State Education Commission and competent departments adopted mainly this method to train the first few batches of patent agents in China. As to the training of patent managerial
personnel, some of the management schools at universities, for instance, Xi'an Jiaotong University, Fudan University, Dalian Engineering Institute, have offered training courses for those from mines, factories and other enterprises to become patent managerial personnel. The training and the skill improvement of present patent personnel will, however, still depend on domestic and international academic exchange.

The general form of popularization of intellectual property in education in colleges and institutes of science and engineering is to offer selective courses, such as "Introduction to Intellectual Property", or "Search of Patent Documentation". The scheduled school hours of these courses are about 40-60, and 2-3 credits are given if the students pass the examination. In addition, offering a series of lectures on patents is one of the forms of popularization of intellectual property education. The lectures cover the topics of patent law, technology transfer, patent search, creation and invention etc., and the duration of each lecture varies. Generally speaking, it takes about 20 school hours for each lecture, and no record nor credit will be given. At present, with regards to intellectual property education in our universities and colleges, the training of legal personnel is handled by law departments, while that of patent agents or patent managerial personnel is generally taken over by a patent firm. Domestic and international academic exchange is organized jointly by universities and colleges, sometimes solely by a university, or the Society of China's Universities and Colleges in Intellectual Property research, sometimes by the State Education Commission or jointly with the Patent Office of China.

Teachers of intellectual property in China comprise the following:

1) Law professors or lecturers who are mainly in charge of training legal personnel and intellectual property personnel not graduated from a law department, aimed at enhancing their legal sense and quality:

2) under the present special circumstances in China, many teachers of intellectual property are either full-time or part-time patent agents who used to be scientists or technicians. They are capable, experienced in practical work, have a wide range of knowledge, and a wealth of teaching experience; in particular, they know much more about the students of science and engineering.

In addition, experts from patent administrations of the State, provinces and municipalities are often invited to lecture at training courses.

PROSPECT OF INTELLECTUAL PROPERTY EDUCATION IN COLLEGES AND UNIVERSITIES IN CHINA

Intellectual property education in colleges and universities in China is in the making and is developing rapidly with a bright prospect for the future. We feel that intellectual property education is faced with the following challenges:

The first is to improve the quality of education. We will establish a systematic course structure for graduate students, train patent personnel (including patent agents, and patent managerial personnel), unfold scientific research and the domestic and international academic and professional level of
full-time and part-time personnel, and compile professional and popular editions of teaching materials of high quality as adapted to our present situation.

The second challenge is to continue the popularization of education. Universities and colleges, in particular, colleges and institutes of science and engineering, should be encouraged to offer courses on intellectual property. It is also important to enlarge the scope of the audience, and this depends in part on improved methods. We also need to supplement the course offerings. In addition to the introductory courses to intellectual property, some universities and colleges could offer courses on neighbouring rights and special courses, in order to satisfy the needs of students at different levels.