

Overseas Intellectual Asset Operations of the NEC Group

This article introduces NEC Group's intellectual asset operations that are conducted by the Intellectual Asset Centers located overseas. It focuses in particular on the patenting support and anti-counterfeiting activities of the Intellectual Asset Center, China.

Global Deployment of Intellectual Asset Operations

NEC has opened Overseas Intellectual Asset Centers at three locations, China, Europe and North America to deploy its intellectual asset operations globally.

As strongholds of the Intellectual Asset Management Unit, the primary purpose of the establishment of Overseas Intellectual Asset Centers is to spread NEC's intellectual asset strategies among the local affiliates and realize integrated activities as one NEC Group.

Another purpose is to support the intellectual asset activities of local affiliates that operate businesses in various locations globally. In consideration of this purpose, the Overseas Intellectual Asset Centers are established as intellectual property sections within the regional holding companies as listed below.

- Intellectual Asset Center, China
Established in August 2004 within NEC (China) Co., Ltd.
- Intellectual Asset Centre, Europe
Established in January 2007 within NEC Europe, Ltd.
- Intellectual Asset Center, America
Established in September 2007 within NEC Corporation of America.

(See Fig. below.)

The following discusses the operations of the Intellectual Asset Center, China that is focusing its activities on supporting the patenting procedures of the Chinese local affiliates and on anti-counterfeiting activities.

Activities of the Intellectual Asset Center, China

Currently, more than 60 local affiliates of the NEC Group are operating at various locations in China, including Hong Kong and Taiwan.

Missions of the Intellectual Asset Center, China (hereinafter Chinese IA Center) include; 1) establishment of intellectual asset infrastructure and environment at local affiliates; 2) supporting patent applications of local affiliates; 3) dealing with intellectual property right disputes and counterfeit issues.

(1) Establishing Infrastructure and Environment for Intellectual Asset Activities

In order to establish intellectual asset promotion systems within local affiliates, the center provides corporate rules/regulations matching the requirements of Chinese laws and regulations; help prepare management organizations; and establishes administrative procedures for intellectual asset-related operations.

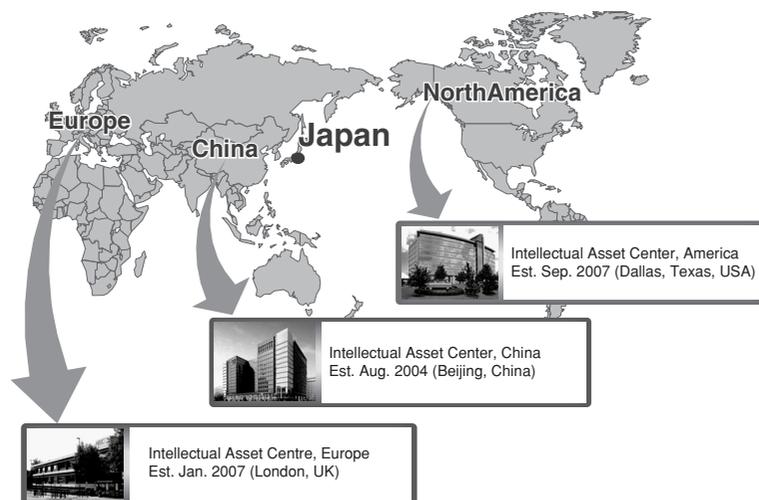


Fig. Overseas Intellectual Asset Centers.

(2) Supporting Patent Applications by Local Affiliates

While the Chinese economy is growing rapidly, many researchers and engineers are not yet accustomed to patent applications procedures. Therefore, the staff in charge of patent affairs at the Chinese IA Center provide various educational courses (basic and advanced) on intellectual asset issues (**Photo 1**).

The staff in charge of patent affairs at the Chinese IA Center will also periodically call on researchers and engineers in order to identify patentable inventions among their routine R&D activities. The staff also holds workshops to advise on the kinds of ideas that may lead to successful patent applications (**Photo 2**).

The Chinese IA Center files applications for patents on inventions identified as described above and supports the entire patent prosecution process in collaboration with outside patent agents up until the grant of the patent right.

(3) Dealing with Intellectual Property Right Disputes and Counterfeit Issues

Counterfeits of NEC products are found throughout China and some have also been discovered in Europe and the Middle East. The copied products discovered up to now include the following items: mobile phone batteries,

fluorescent tubes/lamps, desktop/notebook PCs, mouse devices, keyboards, PC peripherals such as USB memories and web cameras, MP3/MP4 players, audio stereo sets, speakers, DVD/CD players and radio cassette recorders, semiconductor chips, capacitors, transformers and PC power supply units.

Fighting counterfeits is extremely important for NEC. Some of the copied products are not currently manufactured or marketed by NEC, but to leave such copied products unchallenged will erode brand confidence and may eventually cause consumers to avoid the genuine products and services of the NEC brand. The Intellectual Asset Center, China in collaboration with the NEC Corporation head office actively conducts investigations to have our intellectual property rights enforced on the counterfeiters.

The operations of Intellectual Asset Center, China have been described above. NEC aims to become a leading global innovations company, and China has a very important role not only as a market but as location for production and R&D. The operations of the Chinese Intellectual Asset Center are expected to further strengthen the intellectual asset position of NEC in China.



Photo 1 Patent education for engineers at local affiliates.



Photo 2 Idea evaluation workshop.

PASOLINK, NEC's Ultra-Compact Microwave Communications System Achieves No. 1 Global Market Share for the Year 2007

NEC's ultra-compact microwave communications system "PASOLINK" is showing encouraging sales results, especially in the countries of Asia and Middle-East. The main reason for this is the increased number of cellular phone infrastructure construction projects in overseas markets. "PASOLINK" has thus acquired the No. 1 global market share based on its volume of shipments in the third quarter of FY2007 (July to September, 2007). It has also retained the top share in the fourth quarter of FY2007 (October to December, 2007). This performance has resulted in the largest share (30.1%) of the microwave communications systems market throughout the year of 2007. *1

In recent years, subscribers of cellular phone systems in many of the countries of Asia and the Middle-East have been rapidly increasing and the construction and expansion of cellular phone network infrastructures are also rapidly accelerating. NEC's "PASOLINK" features various engineering advantages; 1) products reliability for which it is a runaway leader in the industry, 2) varieties of functions and flexible system configurations and, 3) simplification of installation by minimizing the size and reducing the weight of the product. These achievements have resulted in a first class performance in the industry. Such attractive features have met customer needs and have resulted in an increase in orders from leading cellular phone carrier companies worldwide (**Photo 1** and **Photo 2**).

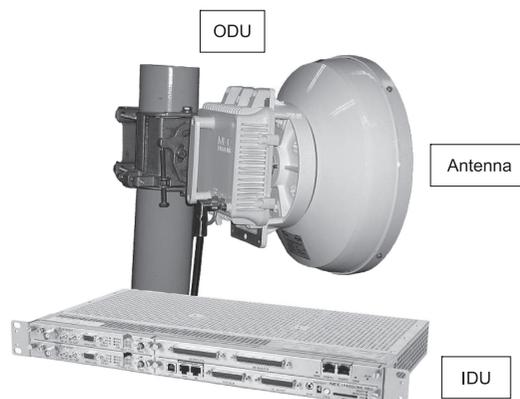
The demands of data communications have also been increased in the fixed-line communications products market, mainly among business users. This trend has been due to the wider dissemination of broadband access communications. NEC's PASOLINK ably meets the demands of such broadband access line construction projects. NEC will continue to drive forward in shipping its products to support the anticipated further business expansion.

NEC began to implement PASOLINK R&D in the early 1980's. As a result of the recent rapid growth in the cellular phone market, the numbers of shipments of PASOLINK, as a communications system for linking the base stations of cellular phone providers, have been greatly increased among cellular phone providers worldwide.

In 2007, the accumulated volume of shipments to supply overseas markets (in more than 130 countries) was in excess of 700,000 units. The number of users has also reached more than 700 (as of the end of December, 2007).

So long as the sales of PASOLINK continue to increase, the demand for a higher product performance can also be expected to increase. NEC, as a leading company in the field of ultra-compact microwave communications systems will continue to develop and release quality products by

enthusiastically exploiting our advantageous position in the market.



ODU: Out-Door Unit, IDU: In-Door Unit

Photo 1 PASOLINK series.



Photo 2 PASOLINK installation site.

*1Source: Skylight Research