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# The Postgraduate Program in Intellectual Property at the ETH Zürich: A Modern Educational Program for Graduates in Science or Technology Wishing to Start a Career as Patent Specialists

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**Abstract:** Since October 1996 the ETH Zürich has offered a Postgraduate Program in Intellectual Property (NDS). The one-year study program is primarily intended for university graduates in science or technology from Switzerland and abroad. It aims to equip its participants with a sound knowledge in intellectual property rights which enables them to obtain a position in the patent, licensing or trademark department of a large industrial concern or a specialist legal office. The NDS is a fulltime program with a wide range of courses given by over one hundred specialists from all around the world. Interactive didactic methods and multimedia are integrated in the teaching. In order to ensure the quality of the program, students and guest lecturers are subject to continuous reciprocal evaluations.

Managed like a small business, the NDS benefits from its independent status at the ETH. Thus, each spring, road shows for potential students are held at several technical universities in Switzerland and abroad. On the other hand, the NDS is financed by the ETH Zürich and is not self-supporting; however, in order to increase outside income, tuition costs have recently been raised from SFr. 5 100 to SFr. 11 100. The ETH Zürich awards a certificate to participants who have successfully completed the examinations, which permits them to use the title 'Dipl. NDS ETHZ für Geistiges Eigentum'. This title is recognized by the European Patent Office and confers exemption from six months of the practice period required for admission to the examination for European Patent Attorneys (reducing the required time to 2<sup>1</sup>/<sub>2</sub> years).

**Keywords:** Education · Intellectual property · Patents · Postgraduate program

## 1. ETH Zürich Fills the Gap

It is increasingly recognized that protecting Intellectual Property is of vital importance for firms across industries, regardless of size.

The acquisition, commercialization and enforcement of intellectual property rights is only possible with the support of specialists who have completed a uni-

versity education in science or technology and, in addition, possess a thorough knowledge of legal principles. In the past, as no specialized education was available in Switzerland, suitable specialists were found abroad or had to be trained on the job. For these reasons, the establishment of the Postgraduate Program (NDS) at the ETH in Zürich was strongly promoted by various circles from trade and industry.

Since 1996 the NDS has had its own premises at Weinbergstrasse 43 in Zürich and has benefited from its own budget and rather independent status. It is managed like a small firm. For example, mar-

keting events, addressing potential participants, are held each year at several technical universities in Switzerland and abroad. Similarly, the program is regularly adjusted to take into account intellectual property or market developments (e.g. electronic commerce, encryption, etc.). Also, in order to ensure the quality of the program, students and guest lecturers are subject to continuous reciprocal evaluations. On the other hand, the NDS is financed by the ETH Zürich and is not self-supporting; however, in order to increase outside income, tuition costs have recently been raised from SFr. 5 100 to SFr. 11 100.

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## 2. Potential Participants

The NDS is primarily intended for university graduates in science and technology from Switzerland and abroad. Preferred disciplines are engineering, physics, chemistry and molecular biology, but graduates in other disciplines such as *e.g.* medicine are also eligible. Furthermore, graduates with a degree in economics or management who have management experience as well as graduates of technical colleges and professional schools are encouraged to enroll in the NDS. In addition to fulfilling the above-mentioned educational criteria, the applicants must also have a good command of English and German, as NDS courses are given in both languages.

Up to now, approximately 60% of the admitted participants had a degree in chemistry or biology. To meet the different needs of the other participants, the modules dealing with 'Patent Applications' and 'Patent Searching' are run in two separate groups.

The program is designed as a one-year fulltime course providing its students with legal knowledge in the field of Intellectual Property rights. Since each module of the program is a thematically separate unit, practicing patent attorneys, lawyers and other persons interested in intellectual property matters may attend individual modules.

## 3. Wide Variety of Courses and Lecturers

In response to increasing globalization of economic and legal systems, the NDS has adopted a strongly international orientation. It is not only multilateral agreements and the activities of the international organizations that are being examined. Intellectual property rights in major jurisdictions (*e.g.* various EU Member States, USA, Japan, China) are the object of modules, with a special focus on cross-border and enforcement issues.

More than 100 guest lecturers from Switzerland and around the world provide more than 800 hours of directed study and contribute, also to the international orientation of the program (for a detailed list of lecturers see [www.ndsge.ethz.ch](http://www.ndsge.ethz.ch)). Furthermore, representing industry, patent offices and law firms as well as universities, they ensure that teaching is both practical and of high academic standard.

The NDS starts off on October 1 each year with an Introduction to Law, fol-

lowed by modules on the European Patent Convention, the Patent Cooperation Treaty and the enforcement of patents. Subsequently, taking a mostly comparative approach, modules on the above mentioned countries' patent laws are scheduled. The second term is devoted to Intellectual Property issues outside the patent, *e.g.* the protection of trade names, copyrights, competition law and licensing contracts. The program ends with the discussion of current legal issues affecting leading-edge technology (information technology, electronic commerce, genetic engineering) and modern commercialization methods as well as strate-

gic issues for innovative enterprises. From July through September the students write their graduation papers. At the end of September two oral examinations take place, the first on patents and the second on other aspects of intellectual property.

Besides the regularly scheduled modules, the students also benefit from two or three symposia and workshops on various current issues. These events are usually also open to the public. Further information can be obtained under [www.ndsge.ethz.ch](http://www.ndsge.ethz.ch).

The ETH Zürich awards a certificate to participants who have success-

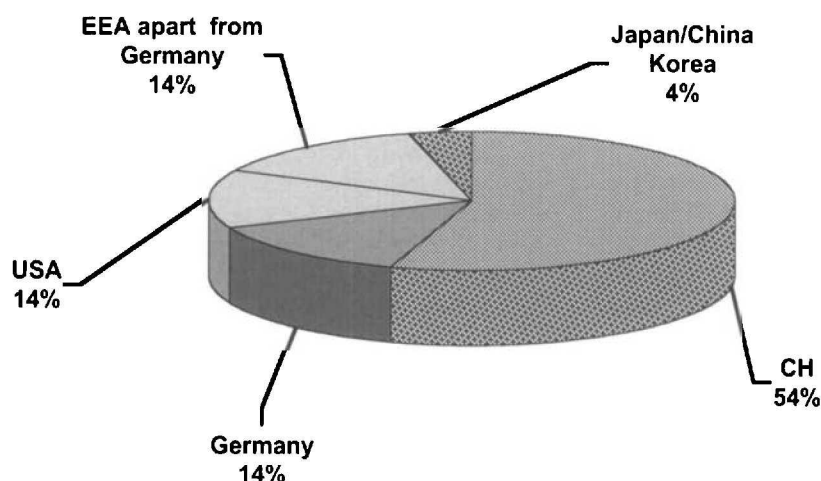


Fig. 1: Lecturers by country of origin

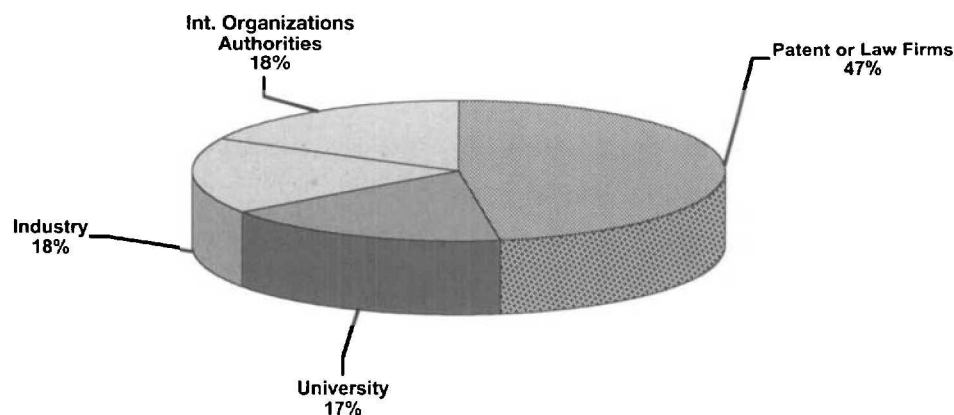


Fig. 2: Lecturers by professional activity

fully completed the examinations, which permits them to use the title 'Dipl. NDS ETHZ für Geistiges Eigentum'. This title is recognized by the European Patent Office and confers exemption from six months of the practice period required for admission to the examination for European Patent Attorneys (reducing the required time to 2½ years).

#### **4. Modern Teaching: Multimedia and Interactive Methods**

The NDS course is in tune with modern requirements in that students are actively involved in the educational process. Alongside traditional teaching methods, participants develop business-like attitudes by discussing case studies and by making PC-supported presentations.

Furthermore, the NDS's own web site [www.ndsge.ethz.ch](http://www.ndsge.ethz.ch) plays an important part in teaching. Apart from the current course schedule (including symposia and workshops), a list of the guest lecturers and general information to the course of study, there is a discussion forum, accessible to the participants, guest lecturers and NDS personnel only.

Two or three times per term each student has to support the lecturer in charge of the module by reviewing the preparatory material, by making it available to the other students and by drafting the minutes of the module, which serve as a basis for the preparation of examinations. All relevant preparatory and follow-up documents classified in chronological order are made available on the discussion forum. Since it is set up by the students themselves while they follow the modules, the discussion forum represents the program's most important interactive tool.

#### **5. Infrastructure: Library and Study Rooms**

The NDS also provides its participants with a library specializing in Intellectual Property, as well as PC-equipped study rooms. The library was set up in November 1996 and is being steadily expanded. It offers access to books, periodicals and CD-ROMS in various languages on the subjects of trademarks, patents, copyrights, designs and models, as well as competition. Further bibliographical information can be obtained on the online NEBIS catalogue, which is found on the Internet under [www.ndsge.ethz.ch](http://www.ndsge.ethz.ch).

Participants have access to the library 24 h a day. The library is also open to the public. For external users the library is open Monday to Friday from 8.30 a.m. to 12.30 p.m. as well as Wednesdays from 2 p.m. to 5 p.m.

#### **6. Future Goals**

The NDS management continuously strives for more emphasis on the international approach of its courses and for expanding its cooperation with other relevant educational programs in England, France, Spain and the US. For these reasons, the proportion of modules given in English is continually increasing.

Furthermore, modules are increasingly held abroad or at international organizations. For instance, last year modules on 'GATT/TRIPS' and 'WIPO' took place in the premises of WIPO and WTO. In addition, in May/June 1999 the NDS paid a two weeks' visit to Washington D.C. where the modules by the US lecturers on 'Multimedia', 'Computer Law', 'Electronic Trade' and 'Licensing Contracts' were held.

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