The Importance of the Academies Network in the Teaching of Intellectual Property[1]

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Abstract
This paper focuses on a research developed to map the main characteristics of twenty-one Intellectual Property Academies (IPAs) which are linked to the Global Network on Intellectual Property Academies – (GNIPA), coordinate by World Organization of Intellectual Property (WIPO). The research aims to identify their organizational structure, mission, activities and achieved results. The creation of IP Academies occurs in a context in which intellectual property and innovation are recognized as key elements for economic competitiveness. The present paper presents relevant information to support, among other things: the strengthening of technical cooperation among the aforementioned Academies; a better access to existing specialized publications and teaching materials; and the establishment of future training programs and research initiatives in the field of intellectual property.

General Guidelines
The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) introduced a new standard for protection of intangible assets. In the knowledge based economy, the ability to generate and diffuse innovations has a direct relationship with levels of productivity and competitiveness achieved by countries. In this context, the structuring of teaching and research activities in the field of Intellectual Property (IP) increases, either in developed or in developing countries. Thereby research centers also play a strategic role in capacity building efforts, as well as the IP offices in the training of the managers of research centers. The IP Academies come in response to this new demand. The first one, Worldwide Academy of the World Intellectual Property Organization (WIPO) aims to meet the new demand for IP knowledge and expertise, and is addressed to the IP education and research. Currently, over 20 countries have established their IP academies, and the majority is linked to institutions responsible for intangible assets protection. Usually, these academies offer specialized professional training; training courses for managers, and postgraduate courses, besides developing research in order to raise the level of knowledge and to contribute to national and international debate in this field.

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* The opinions expressed in this article are the sole responsibility of the authors.

This paper presents results from an international survey conducted among 21 Intellectual Property Academies (IPAs), aiming to respond to questions related to the movement of foudantion and institutionalization of IPAs: how and why are they founded; how do they characterize; what do they do; and how are they structured.
Futhermore the present paper aimed to describe some aspects of the global context in which the IPAs emerged. The survey sought to verify how the national IPoffices adjusted to the socioeconomic context of intangible assets rising valuation, and, thus, the significant demand for the training of professionals specialized in the management of public policies and business strategies aiming the IP protection and commercialization.
The initial part of this paper discusses the IP subject relevance in a global context characterized by an intense technological development and an important commercial dynamism. Aspects concerning the teaching of IP and the structuring of the Global Network on Intellectual Property Academies (GNIPA) are presented. Afterwards, the paper reports the main results of the survey through data processing and analysis, and finally it concludes with a reflection on the perspectives for further studies to be conducted in the IP teaching and research areas.

Background and Objectives
the teaching of intellectual property.
Drahos (1995) raises the issue of knowledge and expertise lack on intellectual property (IP) in most countries at the time of TRIPS agreement negotiations. According to him, IP was considered an incipient and little-studied subject in the sphere of global trade. TRIPS itself foresees technical and financial assistance from developed countries to developing countries (DCs) in the adequacy processes of domestic laws and of human resources training programs. WIPO has an active role in assisting DCs, especially as regards education and training programs. On the other hand, the national IP offices begin to expand their activities beyond the traditional role of the technical analysis of requests for patents, trademarks and other registers, developing joint activities between the divers actors of the IP systems and of innovation, as well as actions of IP dissemination through teaching and research.
According to Takagi *et al.* (2007), IP theme was already being researched and discussed in several national and international forums for a long time. Nonetheless, such discussion was approached from the perspective of a traditional model of training and capacity building that did not meet the growing demand for skilled professionals, resulting from the intensification of commercial transactions on a global scale. The authors report that, for many decades, IP was the exclusive domain of lawyers specialized in this field whose expertise was acquired by working in enterprises with significant IP portfolios or representing clients with issues related to IP rights. In this case, the so-called on-the-job training was the way to complement the few opportunities to study IP in universities. Most part of the training programs available today is structured by national or regional IP offices. Despite the central role such offices have played in the process of skills development, their abilities to meet the existing demand are not satisfactory.
The intensification of trade relations based on products with high added value and technological complexity brings the IP theme to a very importance level which had not been much considered up to a certain time. This leads to the growing demand for professionals with multidisciplinary training.
From the 90s onward, the national IP offices begin to expand their training activities and to develop programs addressed to favor a better understanding of IP as an instrument to increase innovation. Many of these programs are based on strategies for the capacity building of professionals to work in an integrated way with the national policies for innovation and industrial development.
Thus, a significant number of worldwide national IP offices launches a process of establishing units in IP teaching and research, called Intellectual Property Academies. In this context, the next session will

describe the emergence of the Global Network of IP Academies (GNIPA). Its main objective is to facilitate international cooperation in teaching and research in the field of IP.

the global network of intellectual property academies.

The IPAs were established with the aim of contributing to a greater production of knowledge and skills in IP subject. The term Intellectual Property Academy (IPAs) was coined by WIPO at the time of the WIPO Worldwide Academy (WWA) installation in 1998. It aims to become a center of excellence in teaching, training and research. It offers programs for the most distinct target audiences, such as managers, inventors, policy makers, government officials, diplomats and students, among others.

According to WIPO, its Academy's major challenge is to train professionals from different areas to use IP system. Programs are designed to meet the diversity of demand and the need for a multidisciplinary IP approach, comprising disciplines such as management, economics, law, engineering, public policies, biological sciences, etc. From WIPO's pioneering experience, and with its support, over 20 countries have established or are in the process of establishing their Academies. Usually, they are characterized for providing specialized professional training, promoting a culture of the IP system uses, and for offering long-term training courses, including postgraduate ones. Besides, some of these academies develop research and studies to raise the level of knowledge and to build skills of the agents involved in the IP and innovation systems in each country. The majority of these IPAs belongs to the GNIPA.

When the importance of human resources development in IP management was acknowledged, the Brazillian National Institute of Industrial Property (INPI) organized with WIPO the First Symposium of Intellectual Property Academies. It took place in Rio de Janeiro, March 2007. This event aimed to promote the exchange of experiences in IP education, teaching and research, and it assembled seven countries and two regional institutions. During this symposium the participants agreed to create GNIPA. This Symposium's outcomes are summarized in the "Rio Declaration", whose key agreed points were:

- To create a Global Network on Intellectual Property, opening the possibility of participation to other countries;
- To cooperate in the creation of performance indicators for implementing benchmarking for its activities;
- To strengthen international cooperation, proposing periodic meetings to exchange experiences and jointly develop plans and goals;
- To promote access to the source of relevant information through links on their respective websites;
- To develop electronic publication on methods and policies on IP education and research; and
- To organize a task force to implement the aforementioned measures and organize the symposium of the following year.

In May 2008, WIPO organized with the national Chinese IP Office, State Intellectual Property Office (SIPO), the Second Symposium with the participation of 12 countries and three regional institutions. The participants agreed to the following Plan of Action:

- To formally establish the academies' network – GNIPA, under WIPO's secretariat;
- To create the network website and provide teaching materials and other documents;
- To conduct a research with all network members and those interested in joining the organization in order to collect data and information on the academies;

- To study the feasibility of creating an International Journal on Education, Training and Research on IP;
- To study the feasibility of adopting an e-Learning platform compatible with all countries;
- To offer scholarships in postgraduate courses for network members; and
- To compile a list of books and publications on IP which will be available on the website.

It is important to point out two actions have been already implemented. The first one refers to item *d*. of the Second Symposium Plan of Action - in 2009 WIPO launched the electronic journal titled *The WIPO Journal: Analysis and Debate of Intellectual Property Issues*. It aims to promote an environment of debate and theoretical development on IP and its implications, with analytical and theoretical contributions of researchers, scholars, and those involved in IP debate. The second one referes to item *c*. of the Second Symposium Plan of Action, a survey was carried out enabling the collection of data and their respective analysis that we will show later in the current paper.
In 2009, the third edition of the Symposium was held in Munich, attended by 10 countries and three regional institutions. The attendees defined the main issues to be discussed:

- To develop e-Learning compatible platforms;
- To study alternatives for funding and sustainability of the Academies in the long run;
- To propose studies for the assessment of methodologies, teaching materials and impact of the courses offered;
- To develop programs to exchange expertise and information in the IP field;
- To study modalities of scholarships to be awarded to the Master students of the Academies.

In 2010, the Fourth Symposium was held in Seoul with the attendance of 12 countries, two regional organizations. The atendees agreed to develop studies in the following areas:

- E-Learning;
- New techniques to raise awareness on the importance of IP;
- Publication of researches and other subjects related to IP;
- Interdisciplinarity in IP teaching;
- Development of methodology for sectoral economic studies, based on the subject of Intellectual Property.

Until October 2010 nineteen countries participated at GNIPA - Australia, Brazil, Bulgaria, China, Singapore, Croatia, Cuba, the Philippines, Japan, Macedonia, Mexico, Nigeria, Pakistan, Portugal, Republic of Korea, Russia, Switzerland and Ukraine; three regional institutions: African Regional Intellectual Property Organization (ARIPO), European Patent Office (EPO) and Organization Africaine de la *Propriété Intellectuelle (OAPI*), and WIPO. There are other countries interested in joining the network after having had the experience of attending in previous Symposiunms, as Sudan, Thailand, Turkey, Vietnam and Indonesia.

Methods

Data were collected through a questionnaire sent to the IPAs. The analysis enabled the mapping development of: (i) the reasons for the emergence of these institutions; (ii) how they are structured; (iii) the training activities they provide; (iv) the profile of the faculty and of the audience to whom they are addressed; and (v) identification of possible impacts of their programs on the future development of teaching and research in IP.
It was possible to raise a survey with a very large and complexe number of items (more than 30 variables), despite facing some challenges, such as poor literature about the subject, the pioneering nature of this surveyt, the socioeconomic diversity of the countries, and the lack of systematic information and data. The items investigated were:

- characteristics of the institution: size, infrastructure, budget and
- main activities;
- training and education programs offered: course types - regular, e-learning, postgraduate and other programs, as well as the number of participations along the years and history;
- profile of students/participants: background areas, age, gender and professional activities;
- profile of teachers/instructors, background areas, research areas, published articles and books, age and gender;
- motivations, and perspectives: how and when the idea of establishing an academy emerges; reasons for the creation of an academy; challenges in establishing an academy; list of the weaknesses and strengths; partners; and goals for the next two years.

Questionnaires were sent to 18 IPAs members of GNIPA (Australia, Brazil, China, Singapore, Croatia, Cuba, the Philippines, Japan, Macedonia, Mexico, Portugal, Republic of Korea, Ukraine, ARIPO, EPO, OAPI and WIPO); and to three IPAs from countries interested in integrating GNIPA (Sudan, Thailand and Vietnam). From a total of 21 IP Academies, 17 responded the questionnaires, which comprises 81% of the total universe investigated.
Among the 17 IP Academies that responded the survey are the WIPO Academy, which works with the 184 member states of the Organization; nine IPAs in developing countries (Brazil, China, Croatia, Cuba, Mexico, the Philippines, Sudan, Vietnam and Ukraine); four IPAs in developed countries (Australia, Singapore, USA and Japan); two regional organizations (ARIPO, which comprises 16 English-speaking African countries and EPO, which comprises 36 countries).

Results
The IP Academies emerge to enhance the knowledge and expertise in this area. Their goals are to promote specialized professional training for IP Offices technicians; to promote the capacity building for IP and innovation system; to provide a better understanding of IP system; and to offer training and courses in short, medium and long terms, including postgraduate courses.

intellectual property academies features.
This section describes some aspects of the IPAs features. It presents their foundation year, institutional linkage, main goals, and audience targets of their training courses and others programs.
There are IPAs established over a decade as those of China (in 1994), Ukraine (in 1996), and WIPO (in 1998). Among the 17 IPAs that responded the questionnaire, 13 were established after 2002.
As regards institutional linkage, it can also be observed in the following Chart that 10 of them are linked to national IP offices, except for cases of regional organizations (EPO and ARIPO), and WIPO itself. Two IPAs are linked to universities, Australia IPA is linked to Melbourne University, and Sudan IPA is linked to University of Khartoum. There are also independent IPAs that are not directly linked neither to national IP offices nor to universities. This applies to Singapore IPA as a nonprofit organization, and Ukraine IPA as an autonomous public institution linked to the Ministry of Education and Science.

Chart: IP Academies – Year of Foundation and Institutional Linkage.

	COUNTRY	IP ACADEMIES	LINKAGE	FOUDATION
1	China	China IP Training Center (CIPTC)	IP Office	1993
2	Ukraine	State Institute of Intellectual Property (SIIP)	Ministry of Education&Science	1996
3	WIPO	Wipo Worldwide Academy (WWA)	WIPO - Worldwide Organization	1998
4	Australia	IP Research Institute of Australia (IPRIA)	Melbourne University	2002
5	Singapore	IP Academy (IPA)	Non profit Organization	2003
6	Cuba	Oficina Cubana de la Propriedad Industrial (OCPI)	IP Office	2003
7	EPO	European Patent Academy (EPA)	EPO - Regional Organization	2004
8	Japan	National Center for Industrial Property Information and Training (NPIT)	IP Office	2004
9	Vietnam	Research and Training Institute (RTC)	IP Office	2004
10	ARIPO	ARIPO Regional Training Center (ARTC)	ARIPO - Regional Organization	2005
11	Brazil	IP and Innovation Academy (ACAD)	IP Office	2006
12	EUA	Global IP Academy (GIPA)	IP Office	2006
13	Sudan	IP Academy (IPAC)	Kartum University	2007
14	Phillippines	IP Research and Training Institute (IPRTI)	IP Office	2007
15	Croatia	IP Academy	IP Office	2008
16	Portugal	INPI - PT	IP Office	2008
17	Mexico	IMPI Academy	IP Office	in process

The IPAs' objectives might be organized into three axes: specialized professional training; research & studies; and disseminating a culture of Intellectual Property, as described below:

- *Specialized Professional Training* – to build skills in IP through training in regular short, medium or long term courses, face-to-face or distant learning courses, including academic training through postgraduate programs (Master and PhD), with a multidisciplinary approach to the teaching of disciplines such as economics, law, science, management and marketing;
- *Research & Studies* – to stimulate the development of research and studies that can show the relationship between IP and technological, economic and social development, enabling the creation of a critical mass to discuss the theme in the academic environment, besides generating and disseminating high-level specialized knowledge on the subject, therefore contributing to the strengthening of academic production and formulation of appropriate and effective public policies;
- *Disseminating a culture of Intellectual Property* – to promote an environment that stimulates public debate on IP issues and related matters, including the correlation with innovation policies and economic development, as well as to promote the awareness of the public and private sectors on the effects of IP protection upon the exploration and management of intangible assets.

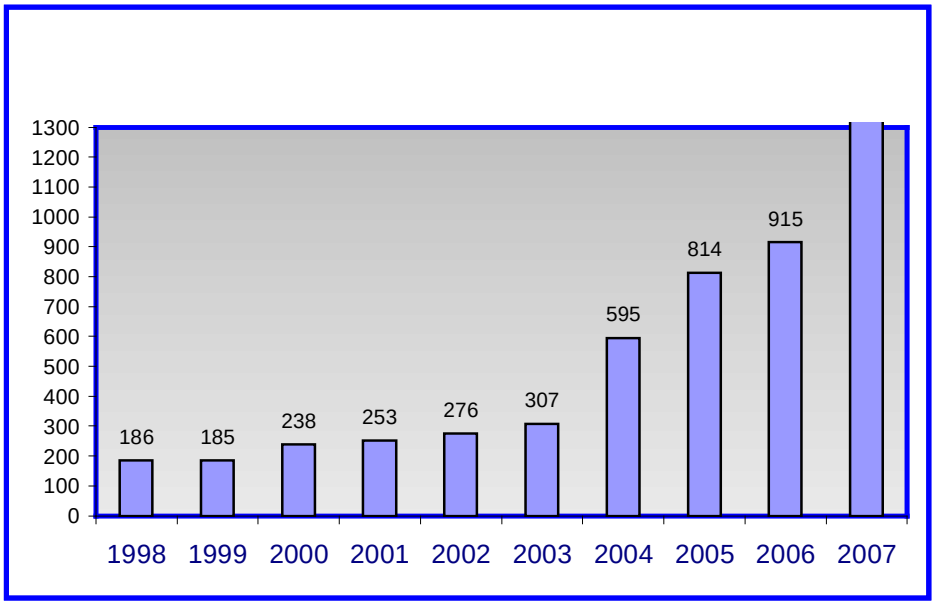
It is interesting to observe that these three axes are similar to the basic functions of an university – "teaching, research and extension", which correspond to the IPAs objectives - "specialized professional training, research & studies, and disseminating a culture of intellectual property", respectively. The IPAs' target audiences can be classified into five groups: researchers&inventors, business managers, IP professionals, policy makers, officials of government bodies, students and members of the civil society. Such diversity and range of target groups indicate IPAs intention or motivation to act beyond the traditional legal-technical issues in the area, enabling reflections on the IP role in much broader and diversified social environments.

the infrastructure of intellectual property academies.

The IPAs infrastructure is quite diverse. It is characterized by data collection of items such as facilities, i.e., number of classrooms, video-conferencing rooms and auditoriums, as well as libraries, library collections, and production of teaching materials. Data were also collected regarding the work teams, the number of individuals involved, and category of labor contract, with a historical series from 1998 to 2007. The last item concerns IP Academies' budget and its evolution, in a historical series from 2002 to 2008.

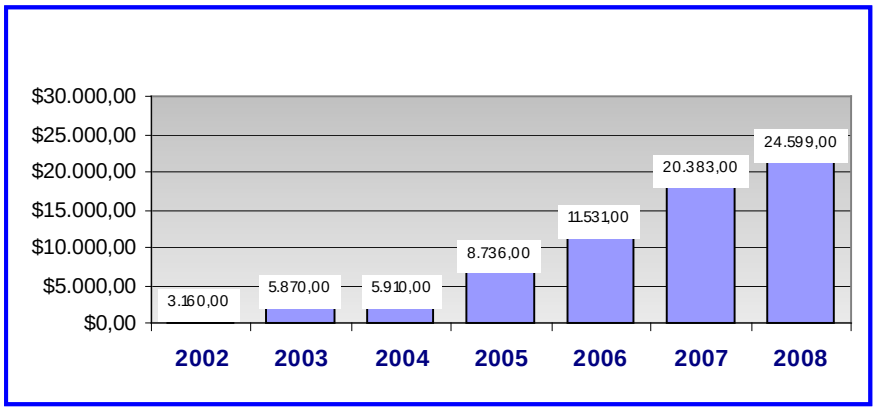
Nearly all of them have libraries and video-conferecing rooms. The academic and teaching materials produced by nine IPAs (Australia, China, Croatia, USA, Portugal, EPO, ARIPO, Vietnam and Ukraine) is a relevant fact since their dissemination can strengthen the Global Network, enabling cooperation and partnership between the IPAs in a field that requires pedagogical knowledge and that is not always available. The bibliographic collection informed by the IPAs totalizes over 150,000 books, most of which are available at WIPO library which comprises 135,000 books.
The 17 surveyed IPAs gather, in their teaching and research activities, 1,500 individuals. From this amount, almost 1,200 teachers/instructors, permanent or casual, are experts in the field of IP, contributing to the strengthening of education in this area. The number of permanent professors/instructors stands out in Australia, Brazil and Ukraine IPAs. It is worth noting that the aforementioned IPAs offer postgraduate courses. As regards the number of non-permanent teachers/instructors we observe a significant number of professionals involved in this category, especially in the IPAs with regional scope, EPO and China, which have 709 and 247 non-permanent professors/instructors, respectively, totaling 1,165.
In Graph 1 we observe the number of individuals in the work teams in the last 10 years. This number is growing steadily and, between the years 2006 to 2007, it shows a 60% increase.

Graph 1: Total Number of Individuals in the IP Academies' Work Teams per Year – 1998-2007.



The item about budget features a significant diversity between small IPAs such as Cuba and Sudan, as well as large ones as WIPO, Japan, USA, EPO and China. Singapore and China IPAs have similar budgets, and the value reported by Singapore is still higher than that of China. The set of the 14 IP Academies that reported their budgets totalizes approximately U$ 20.3 million in 2007.
It is important to note that 90% of the total budget for 2007 are the sum of only six IP Academies - China, USA, EPO, Japan, Singapore and WIPO, and all are above $ 2.5 million.
In Graph 2 we can observe a continued growth of the total budgets reported by the IPAs on human resources development, and training activities, at an average annual rate of growth of around 24%, from 2004 to 2008.

Graph 2: Total Budget of the IP Academies per Year – 2002-2008 (U$ 1,000).



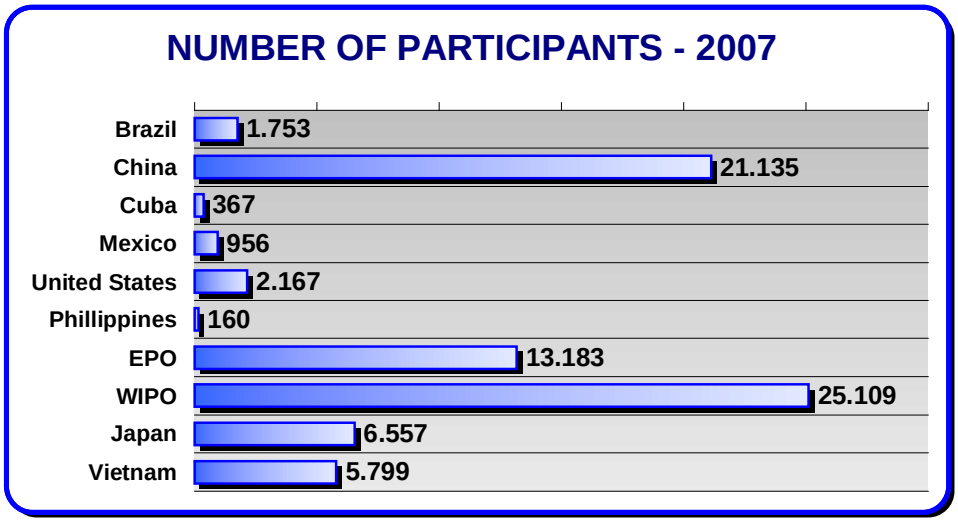
A relevant aspect is the origin of the resources used by the IPAs. According to the data collected, the vast majority (12 IPAs) have 100% of budget resources from the public sector since they are linked to the national IP offices. Some IPAs are making efforts in order to increase the participation of the private sector in their budgets, which was in the range of 5% in EPO and ARIPO, 10% of Australia and Ukraine, and 25% in Singapore. Over the years, the total budget has grown due to the establishment of new IP Academies, but their individual budget also tend to present a growth curve.

programs of training, capacity building and human resources development.

Graph 3 shows the number of participants/students in the various courses offered during the period 2007-2008. Sudan has the lowest number of participants, while WIPO has the highest number, 48 and 25,109 participants, respectively.

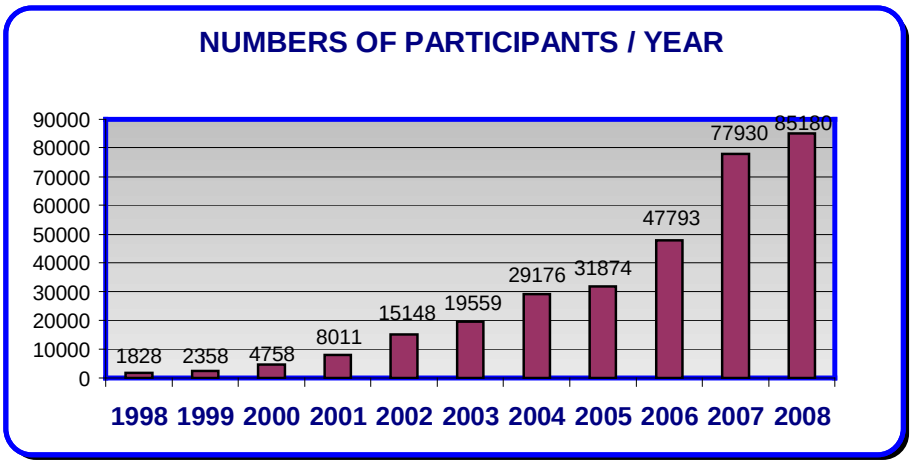
Of the more than 80,000 participants/students, 74% come from three IPAs, China, EPO and WIPO, which are the only IPAs that offer a significant variety of distance learning courses, besides having a regional and international scope. As regards distance learning courses, the number of participants represents 98%, 56% and 44% of the participations in WIPO, EPO and China IPAs programs, respectively.

Graph 3: Number of Participants/Students per IP Academy – 2007-2008.



The total number of participations over the past 10 years can be seen in Graph 4, where is a sharp and constant growth curve. There were over 330 thousand participations in the various types of courses developed by the 17 IP Academies, at an annual average growth around 50%, from 1998 to 2008.

Graph 4: Total Number of Participants/Students per Year – 1998-2008.

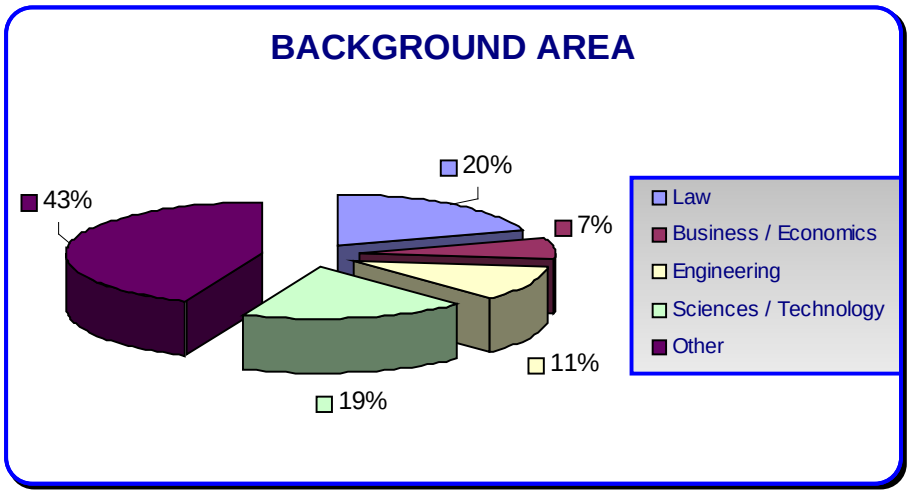


profile of participants and teachers of ip academies.

In this item were adopted the following background areas for participants/students and teachers/instructors - Law, Economics/Business, Engineering, Science/ Technology and Others. Eleven IPAs (China, Cuba, USA, Philippines, Portugal, EPO, WIPO, Vietnam, Sudan, ARIPO and Singapore) reported the estimate of participants/students per background area.

Graph 5 shows the estimative that out of the overall data, 21% of participants/students are in the field of Law, 18% of Science, 11% in Engineering, and 43% are from other unspecified areas.

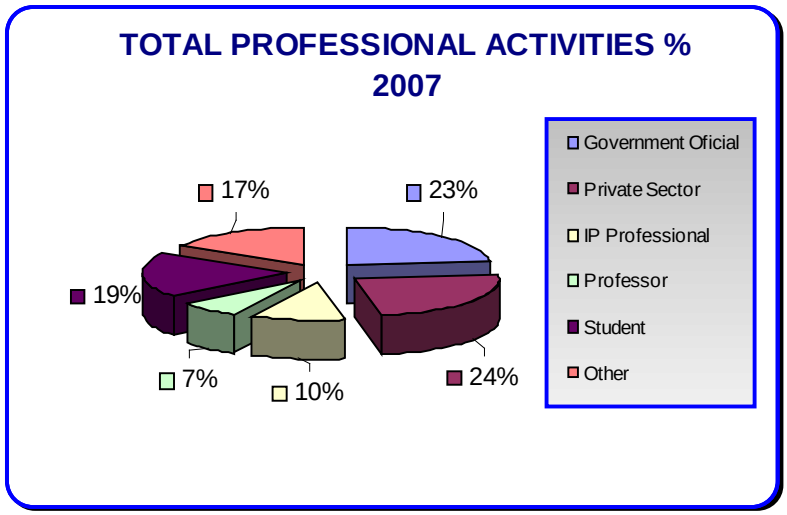
Graph 5: Percentage Estimate of Participants/Students per Background Area – 2007.



As regards the participants/students professional activities, we adopted a classification into six types – government officials, private sector employees, IP professionals, academics, students and other activities. The same IPAs that reported the background area, also reported the professional activities. Graph 6 shows the estimated percentage of participants/students per professional activity. It points out that half of them is either employed in the private sector - 24%, or are government officials - 23%.

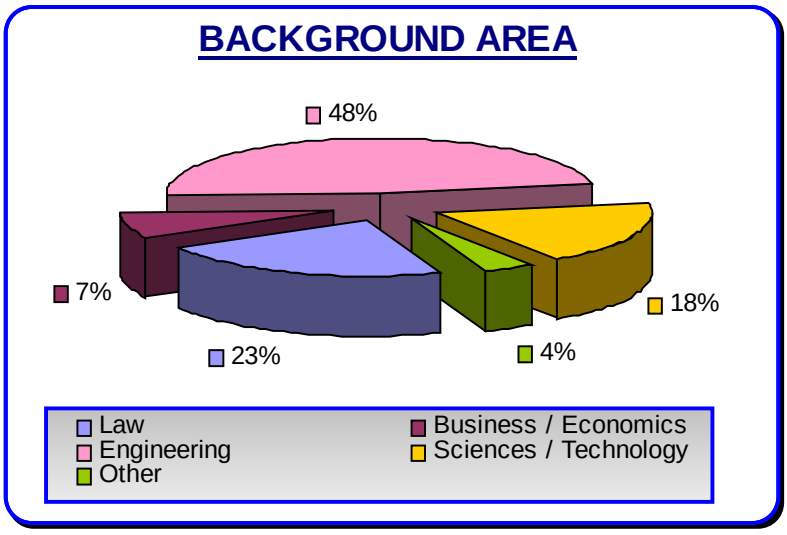
Students, IP professionals and academics are 18%, 11% and 7% of the participants/students, respectively.

Graph 6: Percentage Estimate of Participants/Students per Professional Activity– 2007.



Graph 7 presents the percentage estimates of teachers/instructors background area. The majority of the professors/instructors comes from the Engineering area - 43%, followed by Law - 25%, Science - 17% and Economics/Business Administration - 9%. It is interesting to note that, while 43% of teachers/instructors are from the Engineering area, in the case of participants/students this percentage reaches 11% only. Meanwhile, the percentage of teachers/instructors and participants/students in the area of Law practically are the same, 25% for teachers/instructors and 21% for participants/students, respectively.

Graph 7: Percentage Estimate of Teachers/Instructors per Background Area



motivations, challenges and perspectives.

The responses from the IPAs indicate that their foundation was due to three main reasons: (i) the new global context of the knowledge based economy; (ii) the lack of a multidisciplinary expertise in IP area; and (iii) an increasing demand for a qualified technical staff in the field.

- *The new global context of the knowledge based economy*. The first reason concerns the new economic situation which has arisen due to an increase in the global trade flow, by an increase in foreign direct investment (FDI), and by an increase in the number of patent applications. The new knowledge based economy implies a larger amount of intangible assets that begin to have their trading relationships ruled by the IP system. Besides, the rapid development of new technologies leads to an increase in the complexity of the patent technical analysis, and creates the demand of a growing number of examiners with expertise in a wider range of knowledge.
- *The lack of a multidisciplinary expertise in IP area*. The second reason for the creation of IPAs is the narrow understanding of the theme of IP among the innovation actors such as governments, private sector, and universities. For Brazil IPAl "*there is a lack critical mass in the understanding of intellectual property and also of the need for disseminating a culture of intellectual property*", or, according to WIPO "*The demystification of intellectual property and the promotion of greater awareness of Ipis very relevant. Such awareness would enable people in all countries to gain greater appreciation of the importance of intellectual property as a tool for wealth creation; also, it would help to engender respect for the intellectual property rights of the creators*". Four IPAs - Australia, ARIPO, the Philippines, and Portugal indicate that the emergence of IPAs took place in response to Governments policies and strategies.
- *An increasing demand for a qualified technical staff in the field*. The third motivation concerns the growing demand for qualified and specialized professionals. The lack of educational institutions in IP with a strategic vision and multidisciplinary approach is perceived by the national IP offices and governments.

Examples of weaknesses and strengths show the IPAs different levels of maturity. While Mexico reveals a lack of infrastructure in education and new technologies as a weaknesses, EPO points out one strengths is precisely the existence of a great infrastructure and expertise in those areas.
The IPAs are established with a broader and multidisciplinary vision. Hitherto IP rights were seen as a technical legal issue of property protection. Nowadays this subject acquires a strategic business perspective within the field of innovation management and knowledge. The focus is on understanding what IP is and the potential uses of its mechanisms to generate wealth and social/economic welfare in countries and regions.

Conclusion and Final Remarks
The information below summarizes the key findings of this survey which aimed to map the characteristics of the IPAs comprised by the Global Network:

- IPAs are a recent phenomenon. Seventy percent of them were founded after 2002;
- Despite the differences in structure and diversity of models, the goals are similar: specialized professional training; research & studies; and disseminating a culture of IP;
- There is also a convergence to the target audience, researchers&inventors, business managers, IP professionals, policy makers, officials of government bodies, students and members of the civil society;
- Over 1,500 individuals are part of the work teams and are involved in IP teaching and research – 1,200 of them exert the function of permanent or non- permanent teachers/instructors;
- The IPAs budgets have been growing at significant rates since 2004: average annual rate of 24%;
- Over 330,000 individuals have been trained at an average annual rate of growth of 48% in the last 10 years;
- There are postgraduate courses in half of the 17 Academies;

- Estimates indicate that the highest percentages of participants comes from Science and Technology (19%), and Law (20%);
- The professional activities of the participants indicate that 24% of them are from the private sector and 22% of the public sector;
- Most professors are from the Engineering (43%) and from Law (25%).

A systematic monitoring of the IPAs' functioning can generate more conclusive information and its analysis can provide a basis for better management of these institutions. Moreover, we expect that the data collected in this research may help to elaborate further issues. In this sense, we could present as future tasks, among others:

- A database development on training experience with the establishment of relevant indicators should improve the IPAs management ;
- Teaching material analysis in order to ensure the diversity of the content offered and, therefore, investigate whether such contents respond to concerns and priorities in public policies or to the needs of the private sector to achieve gains in competitiveness;
- Partnership evaluation, with the various actors, such as teaching and research institutions, technical schools, professional associations, Government, etc,. helps identifie the pros and cons of those relationships.

Collecting, organizing and examining data enable the identification of institutionalization trends of IP teaching activities. We noted, however, that such trends are uneven as regards their integration to the innovation policies. It is necessary to establish a convergence between the missions defined for each IPA, based on government strategies, and market needs. Hence, it would be possible to ensure conditions of IPAs sustainability.

Many are the possibilities of exploring issues around IPAs role, its scope of operation and the expectations they have generated from the increasing number of significant programs they offer. Indeed, further work on IP teaching and research should find answers to many questions since the formation of professionals capable of acting in a knowledge-intensive environment is presented as an important factor for the economic and social development of countries.

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