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WIPO'S DEVELOPMENT COOPERATION PROGRAM IN RESPECT OF THE PROMOTION OF INVENTIVE AND INNOVATIVE ACTIVITY

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Introduction

- 1. One of the main objective of WIPO is to promote respect for the industrial property system throughout the world and at the same time to promote a better use of this system for the purposes of economic and technological progress.
- 2. In relation to the encouragement of invention and innovation, WIPO's Development Cooperation Program in respect of the improvement of the legal and administrative aspects of national industrial property systems is among the most important activities of WIPO. An efficient patent system contributes to the stimulation of innovation in three main ways.
- 3. First, the existence of the patent system, with the possibility of obtaining an exclusive right to work an invention for a limited period of time, constitutes an important incentive to inventive and innovative activity. Research and development today require substantial human and material resources. By allowing the inventor the exclusive use of an invention for a limited period of time, the patent system enables the inventor to exact a premium for, and thus recover, initial R&D costs, and thus acts as a stimulus to the undertaking of further research and development.
- 4. Second, the limited period of time during which the holder of a patent is entitled to the exclusive use of his invention creates an environment which facilitates the efficient development and utilization of patented inventions. It protects the inventor and the investor against uncontrolled competition from those who have not taken the initial financial risk. It thus creates conditions in which risk capital can be safely advanced for the transformation of an invention into an innovation.
- 5. Third, the patent system provides the framework for the collection, classification, and dissemination of the richest store of technological information existing in the world today. As such, it contributes to the dissemination of new knowledge since the right of the inventor to the exclusive use of his invention for a limited period is not granted freely. In return for the grant of a patent, the inventor must disclose the details of his invention to society. Thus the information contained in a patent is made available for research and experimental purposes (although not, of course for commercial use) by all during the term of the patent grant. After the expiration of the patent term, the information falls into the public domain and is freely available for full commercial use by anybody. The patent system thereby contributes to the evolution of the technological base of industry.
- 6. We should also mention the services provided by WIPO under the Patent Cooperation Treaty (PCT), which simplifies and makes more economical for the inventor to secure protection for his inventions abroad. Under the PCT, an inventor desiring to obtain protection for his invention in several countries needs to file only one application, in one place, in one language, designating in it the countries in which he would like ultimately to obtain protection.
- 7. While the patent system is a vital element in the promotion of invention and innovation, many other factors in practice combine to contribute to successful innovation and WIPO also organizes international cooperation in this respect.

WIPO Program and Activities Aimed at the Promotion of Invention and Innovation

- 8. Since the late seventies WIPO has carried on a certain number of activities specifically aimed at promoting inventive and innovative activity and at present the practical objectives of WIPO in the field of promotion of invention and innovation could be summarized as follows:
- (i) to facilitate the exchange of knowledge and practical experience on the promotion and management of inventive and innovative activity among institutions and organizations in developed and developing countries by organizing international, regional and national meetings on relevant subjects;
- (ii) to assist in the creation and strengthening of national and regional inventors' associations, which could effectively secure the necessary moral and material support for their members;
- (iii) to further develop the WIPO award program for inventors, as means to encourage them in the pursuit of their creative efforts;
- (iv) to create opportunities for local inventors and innovators to meet with potential users of their inventions and innovations, both domestically and abroad through support to national and regional authorities wishing to organize inventors exhibitions or contests and/or structures for the assistance to inventors and innovators;
- (v) the support the study and assessment of actual situation and experience with respect to promotion of inventive and innovative activity in various countries and regions of the world;
 - (vi) to support the preparation and publication of relevant studies.
- 9. Meetings, seminars and workshops on invention and innovation are being given an everlarger attention in WIPO programs. Such meetings and conferences are an excellent opportunity for the exchange of ideas, experience and contacts between inventors and other professional groups involved in inventive and innovative activities, namely governmental authorities, research and development institutions, industry and business, etc.
- 10. In cooperation with the International Federation of Associations of Inventors (IFIA), WIPO organized since 1984 international conferences on questions of topical interest to inventors. These conferences are held biannually, concurrently with the IFIA General Assembly. The seventh joint WIPO/IFIA conference took place in August 1996, in Kuala Lumpur (Malaysia). More than 140 participants from 31 countries and international organizations discussed the commercialization of patented inventions. In March 1998, the eight WIPO/IFIA symposium will be held in Budapest (Hungary).
- 11. Another aspect of WIPO's support activities includes assistance to the establishment of support systems for inventors. Such assistance is rendered on request to countries, wishing to form inventors' associations or establish special support services for inventors. In 1980, the International Bureau of WIPO published for the first time *a Directory of Associations of Inventors* (WIPO publication No. 622 (EF)), in order to promote contacts and international

cooperation between such associations. Since then, the Directory has been regularly brought up to date, and currently the ninth edition is under preparation.

- 12. At the international level, WIPO cooperates fully with IFIA in the creation and strengthening of national inventors' associations. The WIPO publications, entitled: *Guide on Association of Inventors* (WIPO publication No. 632 (EFS)), contains some guidelines on how to establish and organize an inventors' association. This guide was published in Arabic, English, French and Spanish.
- 13. In the context of the promotion of inventive and innovative activity, WIPO assists developing countries in the organization of exhibitions and competitions for inventions and inventors at both the national and the regional and international levels. These competitions and exhibitions provide a unique opportunity for inventors to display their creations and make contacts for the marketing of their inventions, and for business circles to receive first-hand information on new inventions and innovations.
- 14. During recent years it has been found that in many countries the question of promotion and encouragement of inventive and creative activity among young people enjoyed growing attention by public and private organizations and by the governmental authorities. That topic was also on the agenda of several recent meetings organized by WIPO with respect to promotion of inventive and innovative activity. Special WIPO gold medals have been awarded to young inventors.

WIPO Awards

- 15. WIPO medals for inventors have been awarded since 1979. The purpose of the awards is to promote inventive and innovative activities, particularly in developing countries or for their benefit. The medals are awarded at exhibitions or contests organized by national or international institutions. The criteria for selecting the recipients are established by the requesting institutions, and WIPO does not intervene in the selection. Since the start of the program in 1979 a total of 413 medals were awarded to inventors and promoters of inventive activity from 70 countries.
- 16. To date, nationals of the following 42 developing countries have been awarded WIPO medals: Algeria, Argentina, Benin, Brazil, Burkina Faso, Cape Verde, China, Colombia, Côte d'Ivoire, Cuba, Democratic People's Republic of Korea, Egypt, El Salvador, Ghana, Guatemala, India, Indonesia, Iran, Iraq, Jordan, Lebanon, Libya, Malaysia, Mali, Mongolia, Morocco, Niger, Nigeria, Paraguay, Philippines, Republic of Korea, Senegal, South Africa, Sri Lanka, Syria, Togo, Tunisia, Uruguay, Viet Nam, the Former Republic of Yugoslavia, Zaire, and Zimbabwe. Nationals of 20 developing countries (Algeria, Argentina, Cape Verde, China, Colombia, Côte d'Ivoire, Democratic People's Republic of Korea, Egypt, India, Jordan, Lebanon, Malaysia, Morocco, Niger, Nigeria, Republic of Korea, Senegal, South Africa, Syria and Tunisia) have been awarded WIPO medals at international exhibitions outside their home country.
- 17. Since 1988, jointly with the Organization of African Unity (OAU) a special OAU-WIPO Award for African Inventors has been established; it is awarded biannually for outstanding achievements of African inventors in specific fields of technology; the first such medal was

awarded in 1988 to an African inventor from Niger for his pioneering work in the field of solar energy; the second OAU-WIPO award was given in June 1991, to an Egyptian inventor, for his invention in the field of health care. In 1993 the OAU-WIPO award was bestowed upon another Egyptian inventor for his invention in the field of health care. In 1995, a Nigerian inventor and in 1997, two inventors from South Africa have received the OAU-WIPO awards for their invention also in the field of health care.

Special Projects and Studies

- 18. In developing countries many inventions are the result of the activities of R&D institutions, but such results are rarely the object of patent applications and grants. To enhance the use of the industrial property system for the promotion of technological innovation, in other words to bring the invention from the desk or laboratory of the employee researcher to the practical use in industry and to the market, WIPO has published a set of *Guidelines for the Management and Exploitation of Patented Inventions of R&D Institutions in Developing Countries* (WIPO publication No. 668).
- 19. WIPO published a new updated version of *the Guide on the Industrial Property Activities of Enterprises in Developing Countries* to assist enterprises in taking full advantage of the industrial property system, in organizing their activities concerning inventions, trademarks, industrial designs and other objects of industrial property.
- 20. Under another special project, the International Bureau of WIPO invited experts from several developing countries (e.g. Brazil, Egypt, Malaysia, the Philippines) to prepare studies or monographs, illustrated by practical examples and case studies, on the experience acquired in, and the problems faced by, the respective countries in the promotion of technological innovation.
- 21. The studies are focused on problems such as the basic functions and objectives of systems or arrangements for the promotion of technological innovation, the functioning and experience of a centralized national system for the promotion of technological innovation, factors that influence the promotion of technological innovation at its different stages and at various levels (enterprise, local or national).

Future activities

- 22. On various occasions, the WIPO Governing Bodies have confirmed that WIPO should continue playing an active role in encouraging industry and commerce enterprises of developing countries, but also inventors and researchers (and their organization) to use better the industrial property system for the benefit of the national development plans in this respect.
- 23. WIPO is examine the operational and financial feasibility of offering more assistance to national industrial property offices in developing countries in organizing services for local inventors, research and development institutions, industry and trade to advise them how to obtain and use industrial property protection and patent information.

- 24. In this relation WIPO staff and/or consultants will provide technical assistance to national industrial property offices, engineering and technical institutes, research and development organizations, industry and trade associations, inventors' associations, etc., towards the creation or strengthening of institutional mechanisms for providing access to, and facilitating the use of, intellectual property information and its further dissemination. This will be done by providing technical assistance for (i) development of modern storage mechanisms for intellectual property information by using machine-readable data carriers, such as CD-ROMs, optical discs, magnetic tapes, etc., (ii) development of, or access to, computerized data bases, and (iii) development and use of information technology for accessing and disseminating such information.
- 25. In respect of development, management and exploitation of intellectual property rights, WIPO will cooperate, at the request of individual governments, or groups of governments, of developing countries, in the planning and organization of new institutional mechanisms, or in adapting existing ones, to encourage and support local inventive or innovative activities (including of women and youth) and the development and commercialization of inventions, by measures such as the following:
- (i)promoting public awareness of the work and achievements of inventors and other creators through, in particular, official recognition by awarding certificates of merit, medals, including the awarding of the WIPO gold medals, and by organizing competitions, exhibitions, etc. for inventors, innovators, designers, researchers, etc.,
- (ii)providing technical assistance for the creation or modernization of national institutions for facilitating the protection and commercialization of local inventions (including university-related institutions),
- (iii)providing technical assistance for formulating policies at the national level for devising fiscal and financial incentives and rewards for innovative and inventive activities and their commercialization,
- (iv)promoting contacts and exchange of experience between inventors, creators and their associations in different countries by organizing international workshops, seminars, etc., and providing assistance in the establishment of associations of inventors,
- (v)supply of information, on request, on patent documents of other countries dealing with the same technological problem,
- (vi)preparation and publication of studies, surveys, guides, directories, or manuals concerning practices followed in different countries for encouraging the exploitation of inventions, including financial support measures,
- 26. WIPO will cooperate, at the request of individual governments, or groups of governments, of developing countries, in creating awareness among small and medium-sized enterprises of the benefits of having inventions patented and trademarks and industrial designs registered both locally and in other countries.

- 27. Such cooperation will take various forms, particularly the organization of national, subregional and regional seminars and workshops for representatives of small and medium-sized enterprises, the provision of expert advice, the preparation of surveys of practices and of case studies, guides and manuals for the establishment of industrial property departments in small and medium-sized enterprises.
- 28. Upon specific request, WIPO will provide assistance to associations of enterprises on how to obtain industrial property protection in the most expeditious and inexpensive way, how to negotiate licensing contracts of protected technology and how to obtain cost-effective dispute resolution involving intellectual property rights, and the procedures offered by the WIPO Arbitration Center in this regard, and how to exploit their industrial property rights as part of their business strategy.
- 29. WIPO will continue to cooperate, at the request of individual governments, or groups of governments and institutions, or other entities in the private sector, of developing countries, in their efforts to increase knowledge and skills for negotiating contracts concerning the acquisition of technology of foreign origin, where such technology is the subject of intellectual property rights and is locally protected.
- 30. Special attention will be given to technologies which are both environmentally sound and contribute to the country's social and economic development. The said cooperation will relate in particular to such questions as:
- (i)how to identify whether the invention, mark or industrial design concerned is protected and, if so, how to identify and locate its owner(s),
- (ii)how to obtain information on the status and coverage of the said intellectual property rights,
- (iii)how to negotiate licensing or franchising contracts for the use of such rights, or to conclude contracts for the transfer of such rights.
- 31. WIPO will cooperate with developing countries in their efforts to promote better understanding by the general public of the various aspects of intellectual property rights, to ensure that all concerned appreciate their economic importance to the country, the benefits of intellectual property protection, and the mechanisms that are necessary to adequately protect intellectual property. The cooperation will focus on facilitating and encouraging the development of public information material, which will be targeted at (i) secondary school students, (ii) higher educational institutions in management, engineering, science and technology, (iii) small and medium-sized enterprises, and (iv) the general public.
- 32. The public information material on intellectual property could be in various media and in different forms, such as newspaper or magazine advertisements, booklets, brochures, posters, exhibits, slides, overhead transparencies, video films, etc.
- 33. WIPO will develop a periodical publication for dissemination of basic ideas about intellectual property and its management for the benefit of specific target groups, and provide inputs in relevant existing publications and journals in developing countries.

- 34. WIPO's regular budget is sufficient to cover only part of those activities; the rest of those activities are expected to be financed with the help of extra budgetary resources, particularly funds for development cooperation made available to WIPO by various countries and intergovernmental organizations or programs such as the United Nations Development Programme (UNDP). The said funds are used according to the terms of the agreements concluded with the donor countries or intergovernmental organizations and programs; they are mainly used for expert services, training, documentation and equipment. Some of the activities are also expected to be carried out with contributions in kind (experts, fellowships, documentation, equipment, documentary searches, etc.) provided by various countries, including developing countries, or organizations.
- 35. The analysis of the practical experience gained and the problems encountered in the respective countries as well as the suggested measures to be undertaken in order to make better use of indigenous creativity confirm the importance attached by governmental authorities and non-governmental institutions to the promotion of technological innovation as a means of accelerating economic development.

Conclusion

- 36. Technological innovation and inventive activity are but two of the factors determining economic and social progress. Companies and economies flourish because of pressures, challenges, and new opportunities, not a docile environment or outside "help" that eliminates the need to improve. Progress comes from change, not from a preoccupation with stability that abstracts it.
- 37. Inventive activity is the driving force for change and progress and it should be encouraged and promoted at all levels. Recent studies have confirmed that nations and national companies prosper in industries that draw most heavily on unique elements of their histories and characters. Every nation has inventors and innovative people who are a unique and most valuable national wealth and should be directed to serve the development of the well-being of each country. A modern patent system is a key element in the promotion and encouragement of inventive and innovative activity; such promotion should be seen as an investment for the future, not as one among many expense items of a budget. It is a very important policy instrument in the fierce international competition that becomes more knowledge and innovation intensive than ever.

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