IPRs and Research Collaboration

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Characteristics of Intellectual Property

- Non-rivalrousness:
  - simultaneous use by multiple entities
  - no bottlenecks or capacity constraints
- Non-excludability:
  - use without authorization cannot be prevented
- For **static** efficiency: optimal to permit free society-wide use as marginal cost low
- For **dynamic** efficiency: need to prevent above, as incentives required to invest in creations, where social value exceeds development costs

…Characteristics of Intellectual Property

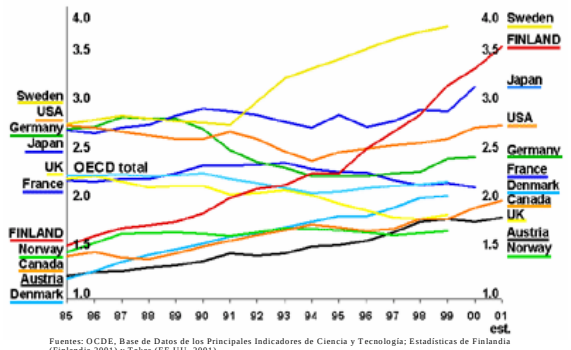
- Therefore, societies faced with fundamental trade-off between two market distortions
- i) Excessively **weak IPRs**, satisfy the static goal but inadequate incentives to create, leading to slower growth, limited culture, lower product quality
- ii) Excessively **strong IPRs**, consistent with dynamic goal but generate insufficient access, inadequate dissemination
- Balance is imperative

3

Role of the State

- To accelerate economic development need to:
  - arrest tendency to **under invest in R&D**
  - create **incentives** for additional investments
- Intervention imperative for IP protection:
  - provides potential **competitive advantage** for innovator
  - creates market distortions, but society benefits (in most cases, for a limited period of time, during the early period of the product life-cycle)
- However, need to balance static efficiency for a specific innovation and the dynamic efficiency for a stream of inventions

R&D in some OCDE countries (% of GDP)



Fuentes: OCDE, Base de Datos de los Principales Indicadores de Ciencia y Tecnología; Estadísticas de Finlandia (Finlandia 2001) y Tekes (EE.UU. 2001).
http://www.tekes.fi/eng/rd/statistics.html

5

INDUSTRIAL PROPERTY

Three group of IP by subject matter

- Means to protect the outcome of R&D ?
- Means to protect brands, names and other identifiers
- Means to protect unfair practices

INDUSTRIAL PROPERTY

Means to protect the outcome of R&D

- Patents and utility models
- Industrial Designs
- Undisclosed information

7

Patent and utility models

The policy behind: Tool to promote innovation through the reward of the inventor and the diffusion of the technology incorporated in the invention.

8

DESIGNS

The policy behind: Tool to promote esthetic forms that can be apply in the industry, Agriculture, Services and other sectors, as the handicraft.

9

UNDISCLOSED INFORMATION

The policy behind:

Tool to promote the control and use of technological/commercial information that is in the hand of the originator.

positives aspect of patents

- Excellent tool to appropriate the out-come of innovation;
- Used as an indicator of performance;
- Important tool to promote transfer of technology; and
- Valuable asset.

Positifs aspects (Cont)

Excellent tool to appropriate the out-come of innovation

- Patentability Examination (most of the IP Offices);
- Exclusive right (research exemption); and
- Possibility of Int. Protection.

Positifs aspects (Cont)

Used as an indicator of performance

- AUTM Survey;
- TLO (MIT and Standford); and
- WIPO PATENT REPORT 2006

Positifs aspects (Cont)

Important tool to promote transfer of technology

- Stanford: "something that all of us at OTL share is the feeling of satisfaction that comes from knowing that we have helped to bring a new technology to the market".
- In 35 years they have reach 2500 Licensing or options Agreements. Some examples:

  i)Microarrays; ii)Genscan;iii) Insulate gate bipolar transistor; iv) FM sound and physical modeling and v) Improved Hypertext Searching (Google).

Aspectos positivos (Cont)

Important Asset

- AUTM survey says that the net income from Licensing Agreements was in the year 2004 of 1,385 billions [among 196 member entities];
- Stanford got [05-06] net US$ 61.3 Millions nets produced from 470 technologies licensed.

Some issues to be considered on IP within the Framework of research collaboration

- Strike a balance (university academic function a the interest in protection through patents; public and private sector interest; self-interest and the interest of the organization –University, lab, enterprise-); and
- Right Policies at the University/Research Center/Government Agencies avoid ownership problems.

Issues to be consider

The balance....!!!!

M.I.T. "General Policy Statement":

"The prompt and open dissemination of the results of M.I.T. research and the free exchange of information among scholars are essential to the fulfillment of the M.I.T´s obligations as an institution committed to excellence in education and research. Matters of ownership, distribution, and commercial developments, nonetheless, arise in the context of technology transfer, which is an important aspect of M.I.T´s commitment to public service. Technology transfer is however subordinate to education and research; and the dissemination of information must, therefore, not be delayed beyond the minimal period necessary to define and protect the rights of the parties"

Issues to be considered

Policies in the University/Research Center framework avoid ownership problems

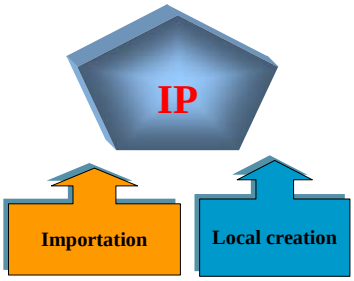
- M.I.T Art. 2.1 "Patent and Copyright ownership policy statement"; and
- Ownership should be define particularly when there is a sponsorship program (public or private)

A big challenge

The most difficult point regarding IP in the research framework is how scientist can appropriate and exploit the out-come on their research activities and transform it in IP assets that can be trade it self

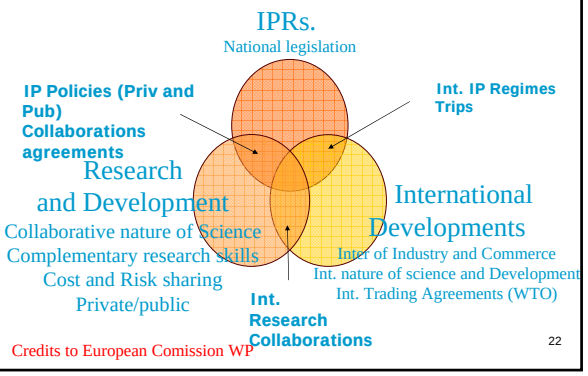
19

Two complementary ways to create assets on IP



21

The Role of IPRs in Collaborations Agmts



Credits to European Comission WP

22

MANY THANKS

23