A U.S. Perspective on Policy Objectives Relating to Intellectual Property and Genetic Resources

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Overview

I. Promoting innovation through the patent system
   1. Incentives of patent system
   2. Risks of a patent disclosure requirement

II. Providing relevant prior art to patent examiners
   1. USPTO Databases
   2. TKDL

III. Preventing misappropriation through national laws outside of patent system

IV. Conclusion
Policy Objective 1

Promoting innovation through the patent system
How do patents promote innovation?
Patents promote innovation through:
* Securing capital
* Sales and employment growth
* Facilitating commercialization of innovative products
* Corporate and economic growth
* Disseminating information
“Patent grants more than double the probability that a startup is eventually listed on a stock exchange—a commonly used metric of startup success”

(Farre-Mensa)
The Effect of Patents on Sales Growth (Farre-Mensa)
The Effect of Patents on Employment Growth (Farre-Mensa)

-20% 0% 20% 40% 60% 80%
1 2 3 4 5

Patent approval effect: increase in employment after t years
Innovating vs. Patenting: U.S. Manufacturing Industries

New patent disclosure requirements reduce innovation:
* Loss of patent rights
* Uncertainty
* Delays
* Expenses
“(D)elays in the patent examination process significantly reduce firm growth, job creation, and innovation, even when a firm’s patent application is eventually approved”

(Farre-Mensa)
The Effect of Patent Delays on Employment Growth

- Effect of each additional review year: decrease in employment after $t$ years
The Effect of Patent Delays on Sales Growth (Farre-Mensa)

Effect of each additional review year: decrease in sales after t years
What options are left?
Policy Objective 2: Providing relevant prior art to patent examiners
USPTO Patent Examiners search databases including:
*Korean Traditional Knowledge Portal (KTKP)
*Malta Wild Plants
*Northern Ontario Plant Database
*Traditional Medicines Database (South Africa)
*Univ. Melbourne Multilingual Multiscript Plant Name Database
*USDA Plants Database
USPTO TKDL access in 2009
Use of the TKDL resulted in:
*A reduction in “weak” or erroneously granted patents
*Claims to inventions that are more distinct from the prior art

Policy Objective 3: Preventing misappropriation through national laws outside of the patent system
Yellowstone National Park Case study

(See WIPO/GRTKF/IC/4/13)
Conclusions

• Promoting innovation through the patent system is a critical objective

• There are many options to address other GR-related concerns of WIPO Members while pursuing this objective

• One is to focus on the objective of providing relevant prior art to patent examiners

• Another is to address misappropriation through national laws outside of the patent system