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

Dominic Keating  
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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:

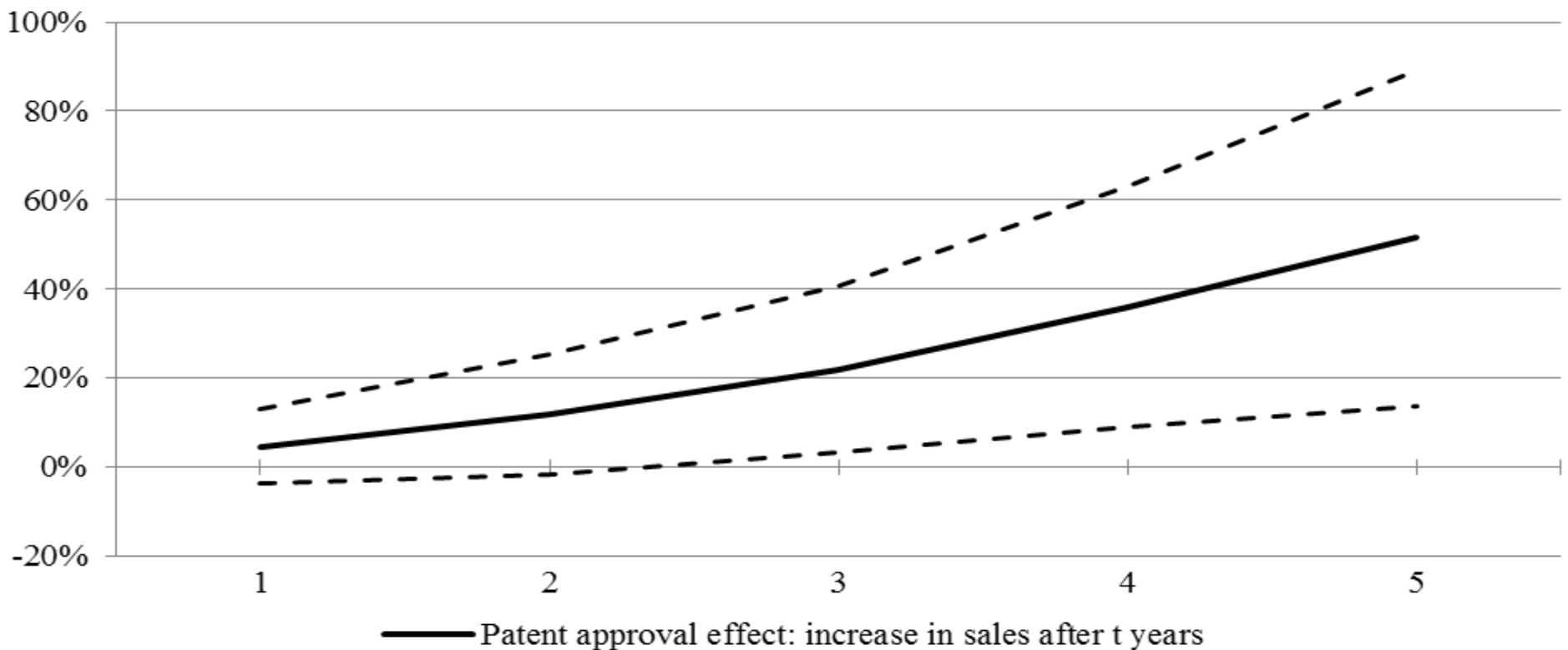
- \*Securing capital
- \*Sales and employment growth
- \*Facilitating commercialization of innovative products
- \*Corporate and economic growth
- \*Disseminating information

**“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)**

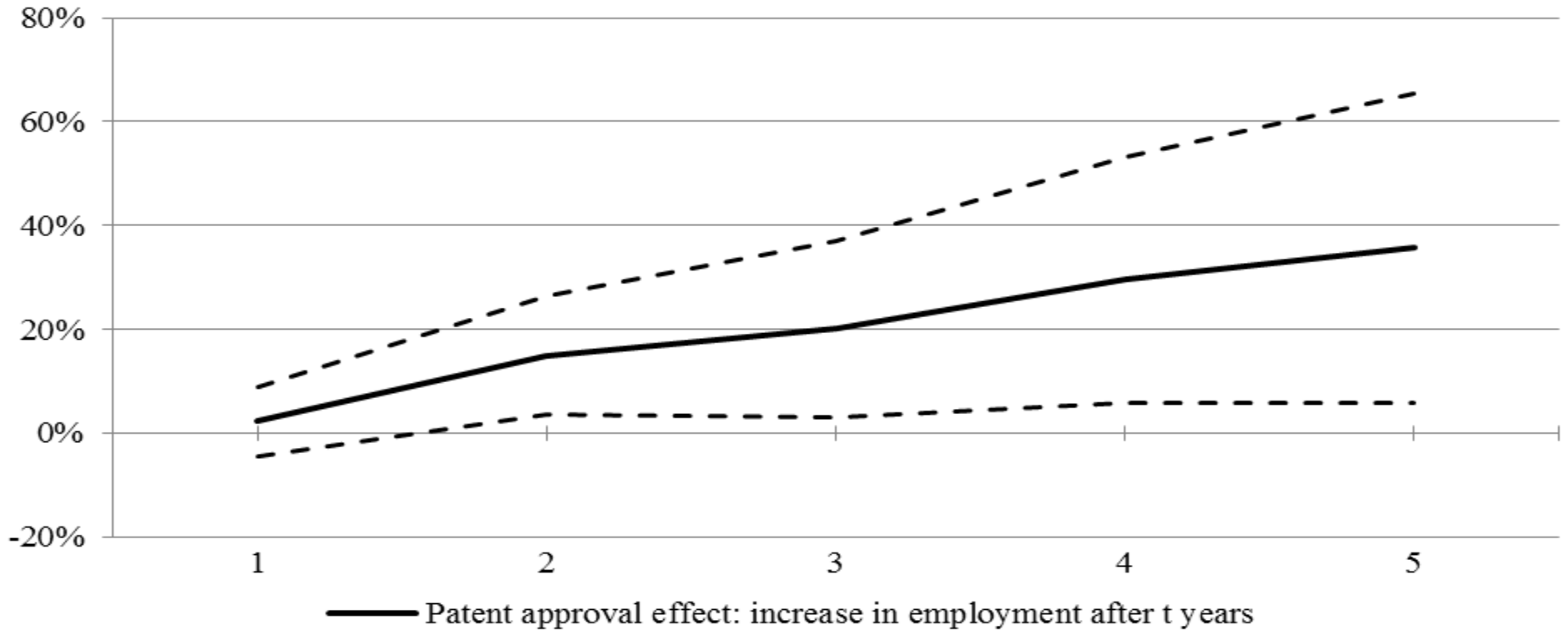


# The Effect of Patents on Sales Growth (Farre-Mensa)

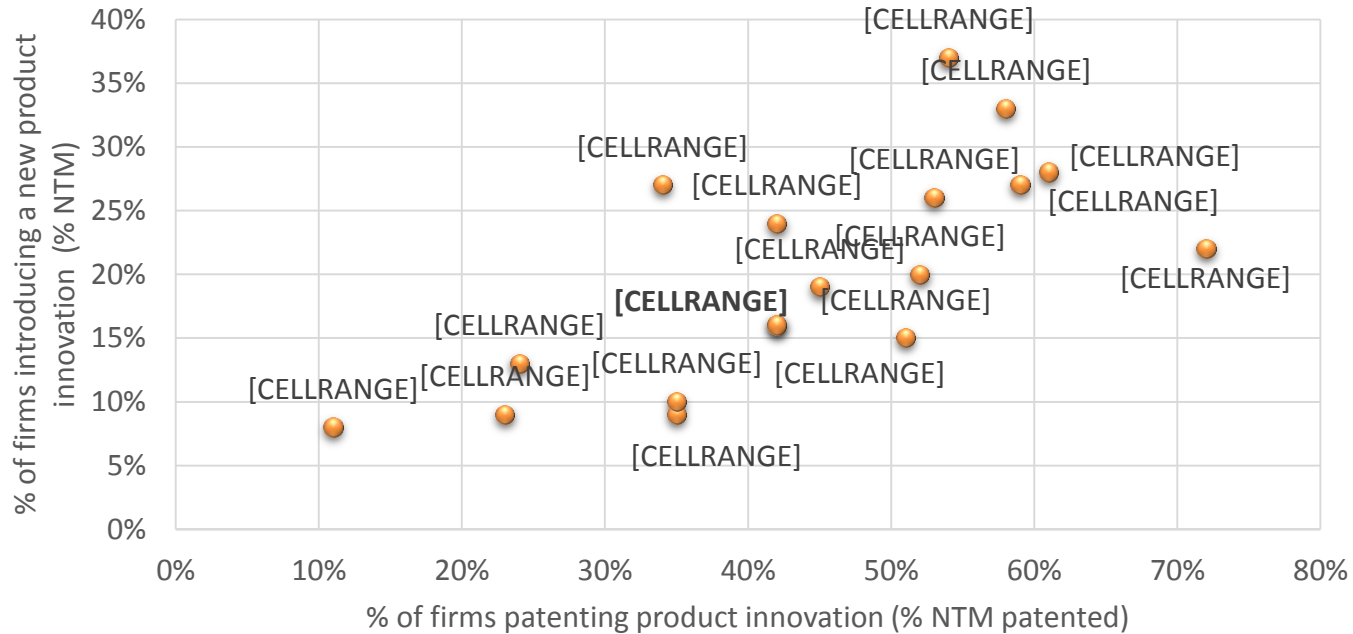




# The Effect of Patents on Employment Growth (Farre-Mensa)



# Innovating vs. Patenting: U.S. Manufacturing Industries



Source: Arora, Cohen, Walsh, 2014. The Acquisition and Commercialization of Invention in American Manufacturing: Incidence and Impact. NBER Working Paper No. 20264, June 2014. <http://www.nber.org/papers/w20264>



# **New patent disclosure requirements reduce innovation:**

- \*Loss of patent rights**
- \*Uncertainty**
- \*Delays**
- \*Expenses**

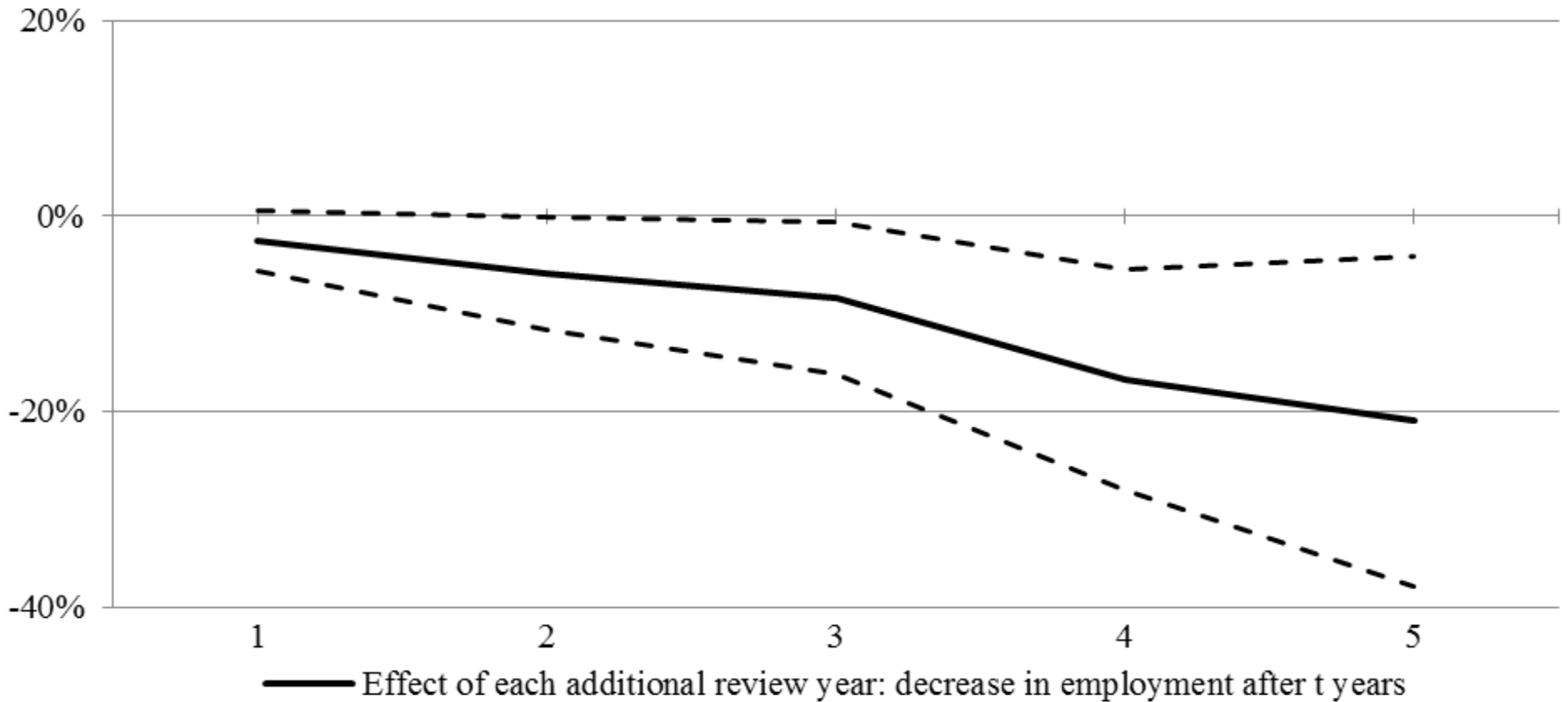
**“(D)elays in the patent examination process significantly reduce firm growth, job creation, and innovation, even when a firm’s patent application is eventually approved”**

(Farre-Mensa)

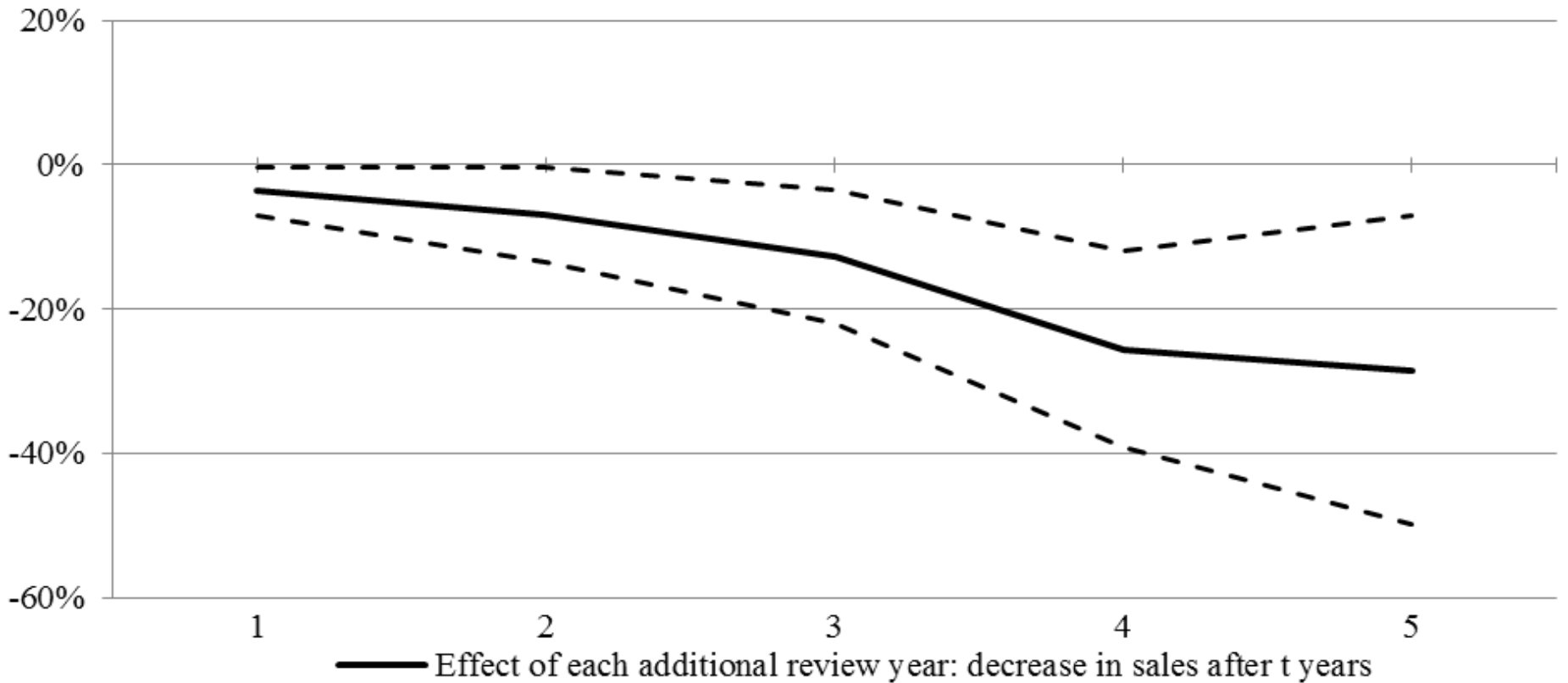
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# The Effect of Patent Delays on Employment Growth



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



# What options are left?

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# **Policy Objective 2: Providing relevant prior art to patent examiners**

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# **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**

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# USPTO TKDL access in 2009

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**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**

Source: Choudhury, Khanna, 2015. Ex-ante Information Provision and Innovation: Natural Experiment of Herbal Patent Prior Art Adoption at the USPTO and EPO. Working Paper 14-070.

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**Policy Objective 3:  
Preventing misappropriation  
through national laws  
outside of the patent system**

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# **Yellowstone National Park Case study**

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

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# 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

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