



# TRADE SECRETS: IMPLICATIONS FOR PHARMACEUTICAL INNOVATION AND ACCESS

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# Covid-19 Trade Secret Issues

For the public at large, Covid trade secrets raise two primary issues:

- (1) When do you have a Covid trade secret, and
- (2) Should access to that trade secret extend to competitors, civil society groups, and/or the public?

## Utility Patents

- Processes
- Manufactures
- Machines
- Compositions of Matter
- Must have “utility”
- No category for “raw data”
- Does not protect: abstract ideas, laws of nature, natural phenomena

## Copyrights

- “Works of Authorship”: writings, musical compositions and recorded music, paintings, sculpture, movies, architecture
- Does not protect: “ideas” (includes raw data), useful features of products/innovations (but cf. software)
- May overlap with “design patent” (new, original and ornamental design for an article of manufacture (unless design is “primarily functional”))

## Trademarks

- Words, phrases or symbols that represents the origin of a product (e.g., logos, brand names)
- But also representational forms of packaging, scents, etc. (e.g., blue Tiffany box)
- May overlap with “design patent”

## Trade Secrets

- All subject matter covered by patents (any types) and copyrights plus abstract ideas, laws of nature, natural phenomena, and raw data/information
- “formula, pattern, compilation, program, device, method, technique, or process.” UTSA § 1(4).<sub>3</sub>

# Trade Secret Overview

- TO KEEP A TRADE SECRET, DON'T DISCLOSE IT
- Prima facie trade secret cause of action
  - Existence of a trade secret (UTSA §1(4)) = information that
    - derives value from being not generally known
    - subject to reasonable efforts to keep secret
  - Acquisition by improper means
    - UTSA §1(1): includes “theft, bribery, misrepresentation, breach or inducement of a breach of duty to maintain secrecy, or espionage through electronic or other means”
  - Misappropriation (use or disclosure) (UTSA §1(2))

# Covid-19 Potential Trade Secrets

- Manufacturing processes and methods
- Test and effectiveness data
- Medical formulas
- Cell lines
- Assays
- Genomic information
- “Negative information” (what doesn’t work)
- Combinations of generally known information
- Technology platforms
- Financial information (i.e., sales projections)

# Increasing Importance of Trade Secret Law

- US Defend Trade Secrets Act (DTSA)
- Amendments to the US Patent Act beneficial to trade secrecy usage
- “Explosion” of trade secrets litigation
  - E.g., *Waymo v. Uber*
  - Growing number of cases under DTSA
  - Worldwide concern about information theft
- EU Trade Secret Directive

# Understanding Secrecy & Entrepreneurship

- Limited empirical study in the area of trade secrets generally
  - Effectively requires surveys
- Even fewer based upon sectors
  - Some study of small and medium-sized entities (SMEs)
- By far, least understood IPR
  - This makes tampering with trade secret law an especially uncontrolled experiment

# Findings from Prior Empirical Studies

- (1) Secrecy is often considered an important “appropriability” mechanism
  - Assists in maintaining first-mover advantage
  - Mechanism: Like other forms of IP, often provides supracompetitive profits that may provide incentives to develop innovative or novel information
  - How does this apply to startups? By technology, industry, size, etc.? Compared to other forms of IP?
  - Can trade secrets be used in other ways? For financing, strategic bargaining, etc.?
- (2) Trade secrets and patents can be economic substitutes
  - Supports standard theory. But can they be economic complements?
- (3) Sectors that rely on process innovation favor trade secrecy (i.e., chemical)



# IP & Entrepreneurship Survey

- Survey focused on patents, but several questions related to trade secrecy (i.e., “secrecy”)
  - Much of this paper drawn from unreported data
- Surveyed top managers in startup and early-stage firms (<10 yrs.)
- Large sample (1,400+), focused on biotech, medical device, hardware, and software / Internet sectors
- Response rates (adjusted):
  - Dun & Bradstreet (population): 9% (software); 24% (bio/med)
  - VentureXpert: 16% (software/hardware); 24% (bio/med)

# Summary of Novel Findings

Three key findings that run counter to standard views.

- (1) Trade secrecy and first-mover advantage are not synonymous, especially for startups.
  - Continuous advancement over competitors, network effects, branding benefits, and other barriers to entry can lead to similar lead-time advantages.
- (2) Related, trade secrets can play other roles, such as strategic bargaining chips in licensing transactions.
  - Lends support to Burstein's critique of Arrow that patents are necessary to promote robust licensing.
  - Like patents, trade secrets may affect the "boundary of the firm."
- (3) Trade secrets and patents may act as complements.
  - Probably even once an invention is patented.
  - Ability to withhold key information.

# TRIPS and Doha Declaration

- Article 7: Discusses the need to transfer technology, to balance the interests of producers and users in a manner conducive to social welfare, and a balance between the interests of producers and users.
- Article 8: Expressly allows members to adopt measures necessary to promote public health, including, arguendo, exceptions to trade secrets.
- Doha: “We agree that the TRIPS Agreement does not and should not prevent members from taking measures to protect public health. Accordingly, while reiterating our commitment to the TRIPS Agreement, we affirm that the Agreement can and should be interpreted and implemented in a manner supportive of WTO members' right to protect public health and, in particular, to promote access to medicines for all. In this connection, we reaffirm the right of WTO members to use, to the full, the provisions in the TRIPS Agreement, which provide flexibility for this purpose.” (Emphases added)

# Considerations

- Trade secrecy as information access control
- Trade secrecy and national security
- Trade secrets as granular
- Trade secret stakeholders
- Trade secrecy as sacrosanct
  - Compulsory trade secret licensing?
  - Voluntary? WHO Covid-19 Technology Access Pool (C-TAP)
- The next pandemic