#### Patent Law

Prof. Roger Ford August 29, 2016 Class 1: Introduction

#### Today's agenda

- → Administrative notes
- → Intro to the patent system
- Mechanics and institutions of the patent system
- → Architecture of the patent document

# Administrative notes

#### Administrative notes

- → Class meetings
- → Make-up classes
- → Reading assignments
- → Grading
- → Patent cases and technology

- → 35 U.S.C. § 101:
  - "Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title."

- → Limited property rights
  - · Negative rights: right to exclude
  - Positive rights: right to <u>sell/license</u>
  - No positive right to practice

- → Group question:
  - What are some reasons a patent holder would <u>not</u> have the right to practice her invention?

#### Sildenafil citrate

Claim 1 of U.S. patent 5,250,534 We claim:

1. A compound of the formula:

**(I)** 

R1 is H, C1-C3 alkyl, C3-C5 cycloalkyl or C1-C3

perfluoroalkyl; R<sup>2</sup> is H, C<sub>1</sub>-C<sub>6</sub> alkyl optionally substituted by OH, C1-C3 alkoxy or C3-C6 cycloalkyl, or C1-C3 perfluoroalkyl;

R<sup>3</sup> is C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>3</sub>-C<sub>6</sub> alkenyl, C<sub>3</sub>-C<sub>6</sub> alkynyl, C3-C7 cycloalkyl, C1-C6 perfluoroalkyl or (C3-C6 cycloalkyl)C1-C6 alkyl;

R4 taken together with the nitrogen atom to which it is attached completes a 4-N-(R6)-piperazinyl

group;  $R^5$  is H,  $C_1$ - $C_4$  alkyl,  $C_1$ - $C_3$  alkoxy,  $NR^7R^8$ , or CONR7R8;

 $R^6$  is H,  $C_1$ - $C_6$  alkyl,  $(C_1$ - $C_3$  alkoxy)  $C_2$ - $C_6$  alkyl hydroxy  $C_2$ - $C_6$  alkyl,  $(R^7R^8N)C_2$ - $C_6$  alkyl,  $(R^7R^8NCO)C_1$ - $C_6$  alkyl,  $CONR^7R^8$ ,  $CSNR^7R^8$  or C(NH)NR7R8;

R7 and R8 are each independently H, C1-C4 alkyl, (C1-C3 alkoxy)C2-C4 alkyl or hydroxy C2-C4 al-

pharmaceutically acceptable salts thereof.

#### Intro to the patent system

March 16, 2013

first to invent

first inventor to file other pre-AIA rules other post-AIA rules

#### → Group questions:

- What are the advantages and disadvantages of a first-to-invent system?
- What are the advantages and disadvantages of a first-to-file system?
- Why do you think the US switched?

## Intro to the patent system

#### → U.S. Constitution:

 [Congress has the power] "To promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive rights to their respective writings and inventions."

→ What does the inventor get?

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  - Monopoly profits / exclusivity
    - \* Ex ante incentive to invent
    - \* Ex post incentive to develop
- → What does society get?

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  - Monopoly profits / exclusivity
    - \* Ex ante incentive to invent
    - \* Ex post incentive to develop
- → What does society get?
  - Public disclosure → knowledge can be used by others

## Intro to the patent system

→ What's the downside of patents?

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  - Monopoly pricing
    - \* Goods become more expensive
    - \* Output falls

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  - Monopoly pricing
    - \* Goods become more expensive
    - \* Output falls
- → Balancing the tradeoff
  - · Limited patent term
  - Limited patent rights?

# Patent mechanics and institutions

#### Patent mechanics and institutions

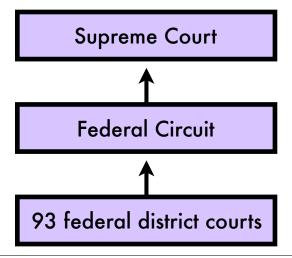
- → Obtaining a patent
  - Patent and Trademark Office (PTO)
- → Enforcing patent rights
  - Federal courts

#### Patent mechanics and institutions

- $\rightarrow$  PTO
  - Examination-based
  - Negotiation creates prosecution history
  - Appeals to PTAB and then Federal Circuit
  - Or, you can bring a claim in federal district court

#### Patent mechanics and institutions

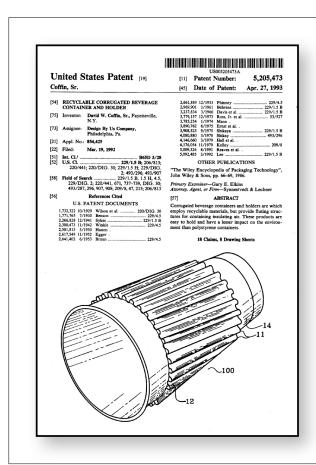
→ Courts

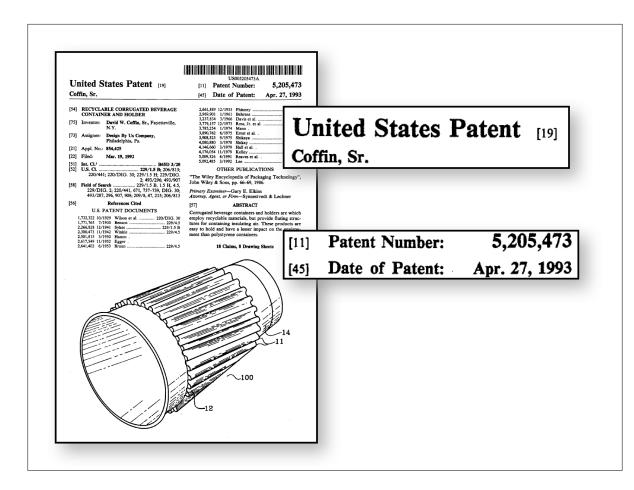


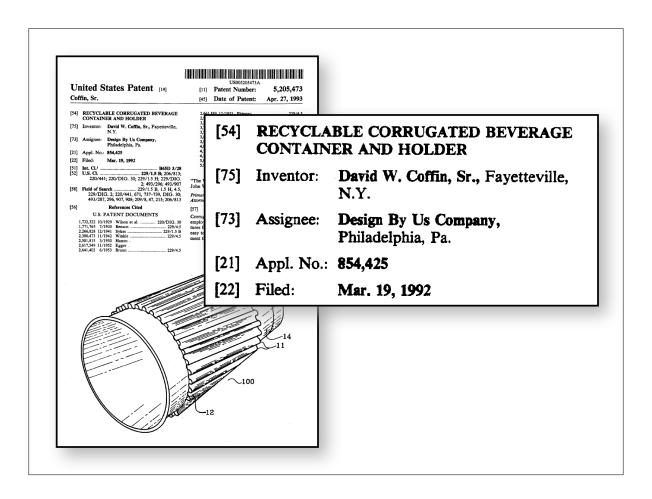
#### Patent mechanics and institutions

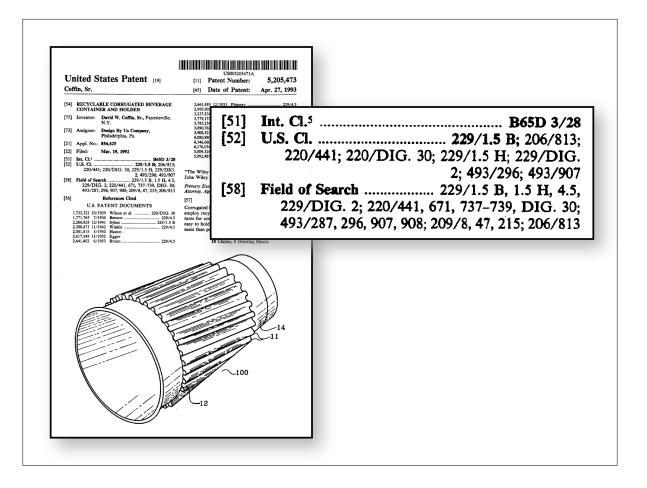
- → International Trade Commission (ITC)
  - Very popular venue for electronics cases
  - Remedy: blocking imports of accused products
  - Cannot award money damages

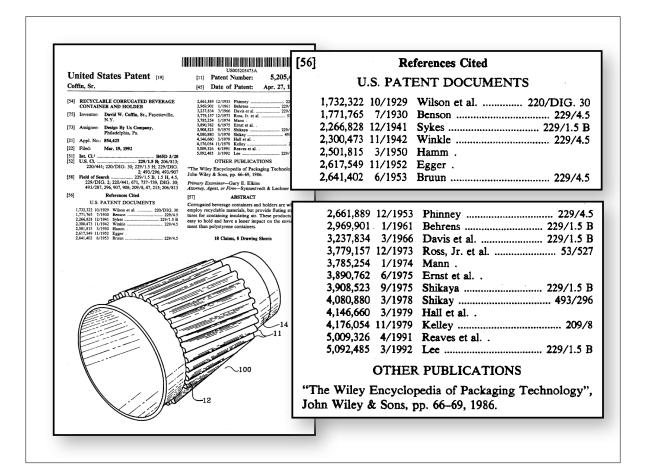
Architecture of the patent document











#### Next time

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 $\rightarrow$  Claim drafting