



# Patent Fundamentals

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# Section A: Obtaining a Patent

Version 3.0  
January 15, 2023



# Patent Application

- Title
- Inventor(s)
- Related inventions
- Government research
- Background
- Summary
- Brief Description of Drawings
- Drawings
- Detailed Description
- Claims
- Abstract of disclosure
- Oath

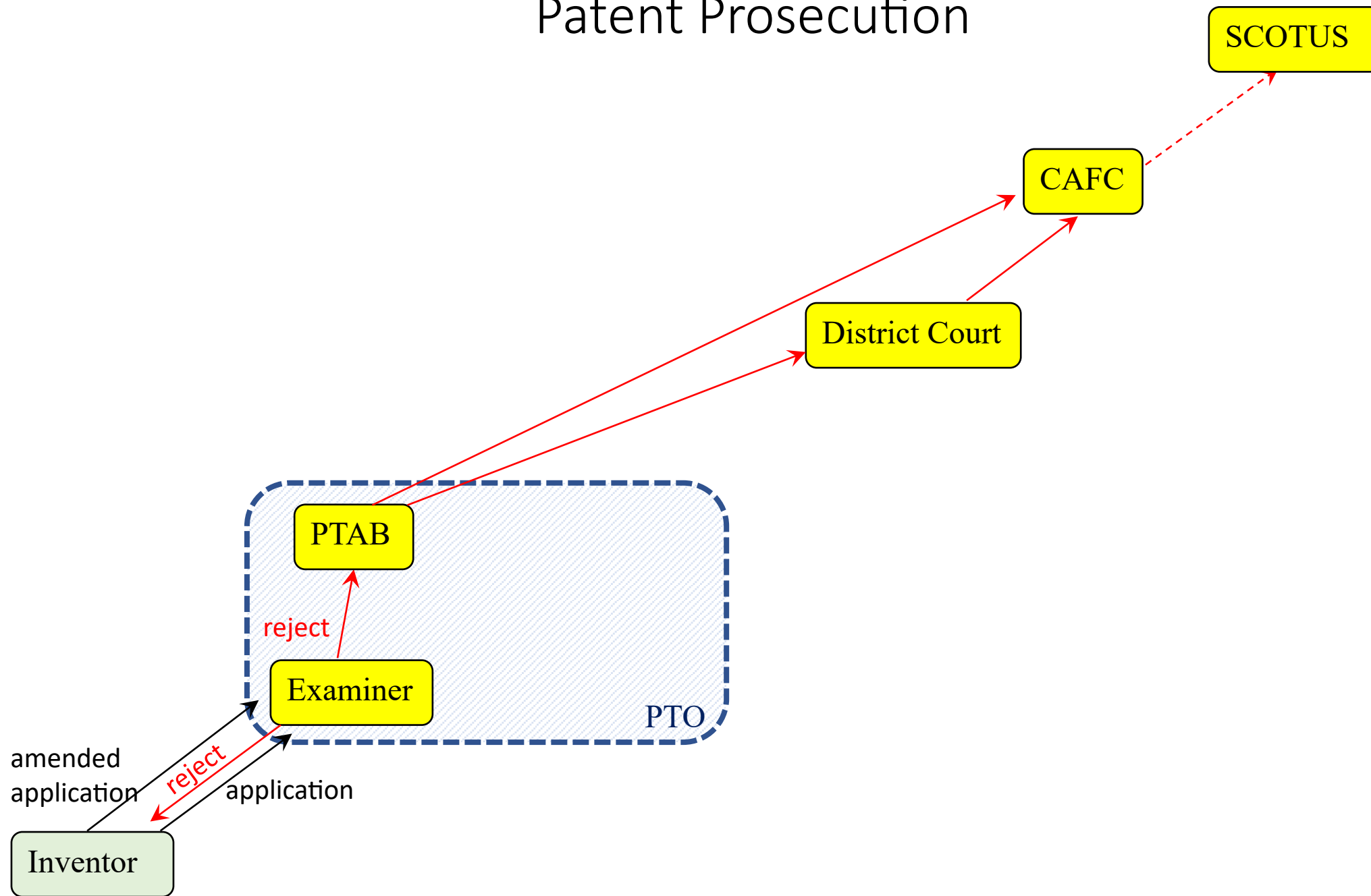




Title	Judge	Duty station	Born	Term of service			Appointed by
				Active	Chief	Senior	
Chief Judge	<a href="#">Kimberly A. Moore</a>	<a href="#">Washington, D.C.</a>	1968	2006–present	2021–present	—	<a href="#">G.W. Bush</a>
Circuit Judge	<a href="#">Pauline Newman</a>	<a href="#">Washington, D.C.</a>	1927	1984–present	—	—	<a href="#">Reagan</a>
Circuit Judge	<a href="#">Alan David Lourie</a>	<a href="#">Washington, D.C.</a>	1935	1990–present	—	—	<a href="#">G.H.W. Bush</a>
Circuit Judge	<a href="#">Timothy B. Dyk</a>	<a href="#">Washington, D.C.</a>	1937	2000–present	—	—	<a href="#">Clinton</a>
Circuit Judge	<a href="#">Sharon Prost</a>	<a href="#">Washington, D.C.</a>	1951	2001–present	2014–2021	—	<a href="#">G.W. Bush</a>
Circuit Judge	<a href="#">Kathleen M. O'Malley</a>	<a href="#">Washington, D.C.</a>	1956	2010–present	—	—	<a href="#">Obama</a>
Circuit Judge	<a href="#">Jimmie V. Reyna</a>	<a href="#">Washington, D.C.</a>	1952	2011–present	—	—	<a href="#">Obama</a>
Circuit Judge	<a href="#">Richard G. Taranto</a>	<a href="#">Washington, D.C.</a>	1957	2013–present	—	—	<a href="#">Obama</a>
Circuit Judge	<a href="#">Raymond T. Chen</a>	<a href="#">Washington, D.C.</a>	1968	2013–present	—	—	<a href="#">Obama</a>
Circuit Judge	<a href="#">Todd M. Hughes</a>	<a href="#">Washington, D.C.</a>	1966	2013–present	—	—	<a href="#">Obama</a>
Circuit Judge	<a href="#">Kara Farnandez Stoll</a>	<a href="#">Washington, D.C.</a>	1968	2015–present	—	—	<a href="#">Obama</a>
Circuit Judge	<a href="#">Tiffany P. Cunningham</a>	<a href="#">Washington, D.C.</a>	1976	2021–present	—	—	<a href="#">Biden</a>
Senior Circuit Judge	<a href="#">Haldane Robert Mayer</a>	<a href="#">Washington, D.C.</a>	1941	1987–2010	1997–2004	2010–present	<a href="#">Reagan</a>
Senior Circuit Judge	<a href="#">S. Jay Plager</a>	<a href="#">Washington, D.C.</a>	1931	1989–2000	—	2000–present	<a href="#">G.H.W. Bush</a>
Senior Circuit Judge	<a href="#">Raymond Charles Clevenger III</a>	<a href="#">Washington, D.C.</a>	1937	1990–2006	—	2006–present	<a href="#">G.H.W. Bush</a>
Senior Circuit Judge	<a href="#">Alvin Anthony Schall</a>	<a href="#">Washington, D.C.</a>	1944	1992–2009	—	2009–present	<a href="#">G.H.W. Bush</a>
Senior Circuit Judge	<a href="#">William Curtis Bryson</a>	<a href="#">Washington, D.C.</a>	1945	1994–2013	—	2013–present	<a href="#">Clinton</a>
Senior Circuit Judge	<a href="#">Richard Linn</a>	<a href="#">Washington, D.C.</a>	1944	1999–2012	—	2012–present	<a href="#">Clinton</a>
Senior Circuit Judge	<a href="#">Evan Wallach</a>	<a href="#">Washington, D.C.</a>	1949	2011–2021	—	2021–present	<a href="#">Obama</a>

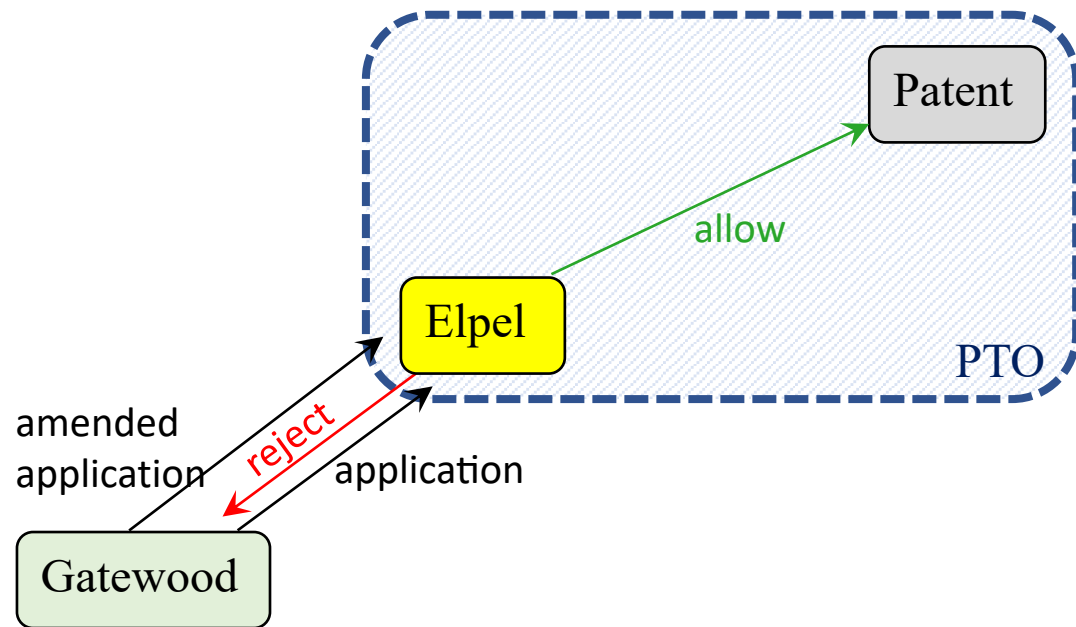


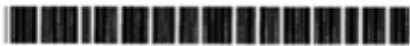
# Patent Prosecution





# Patent Prosecution





US005673509A

**United States Patent** [19]  
**Gatewood, Jr.**

[11] **Patent Number:** 5,673,509  
[45] **Date of Patent:** Oct. 7, 1997

[54] **DISPOSABLE RODENT TRAP**  
[76] **Inventor:** Askew W. Gatewood, Jr., 3515  
Wabash Ave., Baltimore, Md. 21215

3,312,337	4/1967	Martin	383/106
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[21] **Appl. No.:** 594,899  
[22] **Filed:** Jun. 31, 1996  
[51] **Int. Cl.<sup>6</sup>** A01M 1/14; A01M 23/00  
[52] **U.S. Cl.** 43/58; 43/114; 383/76;  
383/106  
[58] **Field of Search** 43/58, 81, 114,  
43/136, 137; 383/76, 106; 206/447

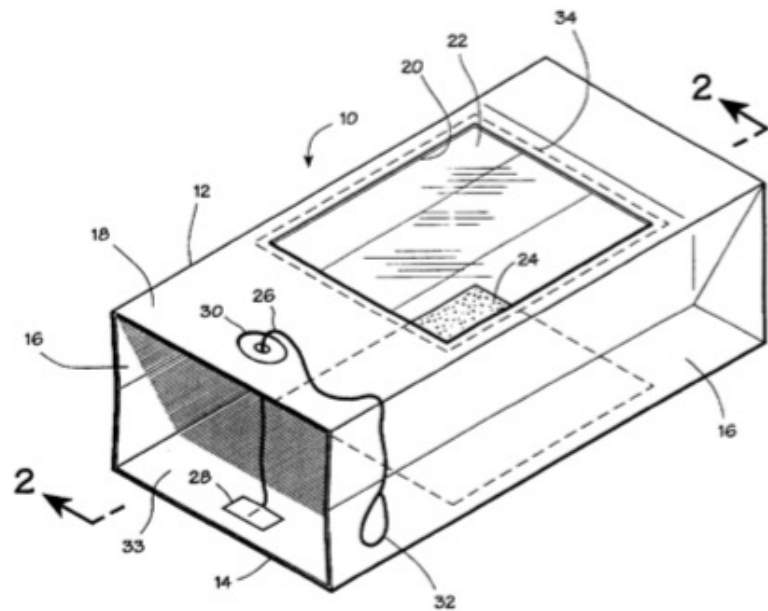
**FOREIGN PATENT DOCUMENTS**  
459871 9/1968 Switzerland 383/76

*Primary Examiner*—Jeanne Elpel  
*Attorney, Agent, or Firm*—Walter G. Finch

[57] **ABSTRACT**  
This invention relates to an adhesive type rodent trap that is disposable and has an opaque housing with a window, preventing unaided view of the trapped rodent but allowing quick intended viewing for checking if the trap is occupied. The trap further includes an entrance and a handle for closing the entrance to the trap and carrying the trap.

[56] **References Cited**  
**U.S. PATENT DOCUMENTS**  
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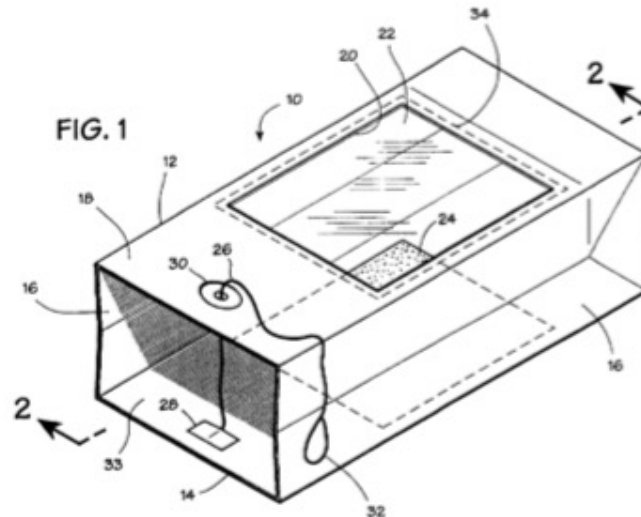
6 Claims, 1 Drawing Sheet



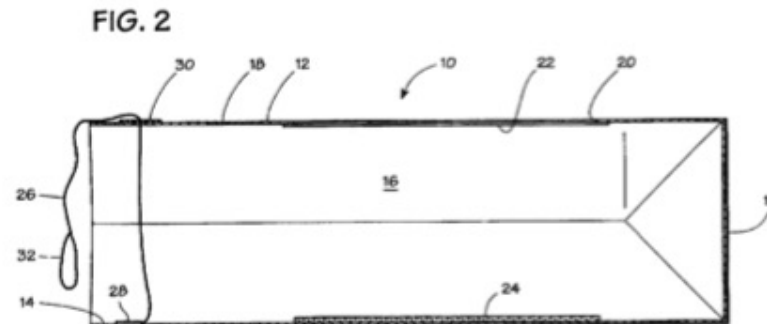
**U.S. Patent**

Oct. 7, 1997

**5,673,509**



**FIG. 1**



**FIG. 2**



**DISPOSABLE RODENT TRAP**

**BACKGROUND OF THE INVENTION**

Disposing of a trapped mouse or rodent is an extremely unpleasant task. If caught in a conventional spring loaded trap, the rodent is usually killed upon triggering the trap, however, the force of the spring has a tendency to break the mouse's skin and expose blood and possibly some internal organs. If, on the other hand, the mouse is caught in the newer sticky type trap, it is usually still alive and violently twisting while struggling to free itself, to the point where limbs become broken, deformed and possibly separated. Thus, disposing of a rodent caught in a spring loaded trap is dirty, smelly if not recently discovered, and potentially hazardous, while disposal of a rodent caught in the sticky-type trap can be quite inhumane as the person disposing of the deformed, whimpering mouse must observe its agony as he or she grasps the edge of the trap.

What is needed to cure the deficiencies inherent in the sticky type trap is a disposable, substantially oblique housing for the trap. The trap additionally should have a small window to check for occupancy and a handle providing a closure means as well as a carrying means for the housing. A trap such as this would thereby prevent direct vision of the trapped mouse or rodent. The new trap should also be constructed inexpensively so that the disposability of the trap is economically feasible. The present invention fulfills these and other considerations not addressed in the prior art.

**SUMMARY OF THE INVENTION**

The present invention relates to a mouse trap. More particularly, this invention relates to a mouse trap that is disposable and has a opaque housing with a translucent window, preventing unintended view of the trapped rodent but allowing quick intended viewing for checking if the trap is occupied.

This invention is a substantial improvement to existing sticky type mouse and rodent traps. Instead of having an exposed tray of trapping adhesive, as commonly used today, this invention encloses the area of adhesive within an opaque housing, thereby preventing feet, small children, or even the ear of a napping dog from becoming accidentally attached. The housing, while preventing inadvertent attachment, additionally provides a shield precluding a person from directly looking at or incidentally touching the trapped rodent while disposing of the trap. While the housing of the trap is opaque to prevent unintended viewing of the trapped animal, a small section is translucent, allowing the trap to be periodically checked so a trapped rodent can be disposed of quickly.

To further assist in disposing of the trap, the housing is only open on a single side, with its open side containing a drawstring type handle. Thus, the disposer can merely pull the handle and the open side of the housing will close, encasing the trapped rodent within the housing of the trap.

It is therefore an object of this invention to provide a trap which is inexpensive and disposable.

It is a further object of this invention to provide a trap which is concealed within a substantially opaque housing to prevent unintended viewing of a trapped rodent.

It is still another object of this invention to provide a trap which has a small viewing portion to visually check if the trap has caught a rodent and is in need of disposal.

It is still a further object of this invention to provide a trap which has only one opening such that a drawstring type handle can close the trap with a single pull.

It is yet another object of this invention to protect unintended animals and people from become accidentally adhered to the trap.

**BRIEF DESCRIPTION OF THE DRAWINGS**

FIG. 1 is a isometric view of the rodent trap illustrating the novel features of the invention.

FIG. 2 is a right side cross section of the rodent trap shown in FIG. 1.

**DETAILED DESCRIPTION OF THE DRAWINGS**

Referring to FIGS. 1 and 2, the general trap 10 is illustrated in isometric perspective and right side cross section, respectively. The trap housing 12 is shown comprising two opposed vertical side faces 16, a top face 18, a bottom face 14 opposing the top face 18, and an enclosing end face 17. These faces in tandem creating an entrance opening 33 opposite the enclosing end face 17. The housing may be constructed out of any lightweight flexible material, such as TYVAK™, and preferably is shaped substantially similar to a typical brown paper lunch bag. The faces of the housing 12 are assembled either by precision folding secured with adhesive, as a paper bag is constructed, or are sewn at the seams. The material must, however, be rigid enough to stand open on its own when assembled and resting on its bottom face 14.

While the exterior of the bottom face 14 rests against the floor, the interior face contains the trapping adhesive 24. The adhesive 24 can be any type that is sufficiently tacky enough to restrain and confine the specific rodent intended to be trapped. The adhesive 24 is preferably placed either in the center or close to the rear of the bottom face 10, assuring that a trapped rodent is not visibly extending outwardly through the entrance opening 33. The area of adhesive 24 can be an existing trap slid into the housing or preferably, is incorporated directly within the bottom face 14 of the trap 10.

The top face 18 includes a translucent viewing window 22, preferably located in an opening 20 directly above the adhesive trapping area 24 and being similar in shape and area. The window is attached to the opening 20 of the top face 18 by a strip of adhesive or a line of stitching 34.

This window 22 allows for visual checking of the adhesive area 24 to see if a rodent is attached. Thus, viewing of a trapped rodent is quick with the limited purpose and duration of checking the trap 10 for occupancy. If the trap 10 is occupied, it can then be disposed of without further viewing of the trapped rodent.

The window 22 also has a function when the trap is not being used. It acts as a cover for the adhesive area 24 when the trap is folded flat, either by fully covering it or by covering a raised portion about its periphery, limiting the amount of window 22—adhesive area 24 contact to that which is completely necessary.

Disposal of the trap 10 is quite simple due to the inclusion of a draw string type closing and carrying handle 26. This handle 26 is located near the entrance opening 33, attached to the bottom face 14 and passing through the top face 18 via a reinforced aperture 30. The handle 26 is constructed from an inexpensive elongated strand, preferably string. It is attached to the interior of the bottom face by an attaching means 28, either tape or cross stitching. The string handle 26 extends upward, through the reinforced orifice 30, and terminates into a small loop 32, facilitating both pulling and carrying. Therefore, when the loop 32 of the handle 26 is pulled, the bottom face 14 and the top face 18 converge upon

each other, substantially sealing the entrance opening 33, thereby closing the trap housing 12, encasing the rodent within. The handle 26 is then used to carry the trap to a proper disposal place, and a new trap is set to capture additional rodents.

While the preceding description is the preferred and best embodiment of the invention, slight variations can be incorporated without deviating outside the spirit or scope of the claims or contemplation of the inventor.

- I claim:
1. A disposable rodent trapping device, comprising: a substantially lightweight and flexible housing having a bottom face, a top face, an entrance opening in said housing for said rodent, and an aperture in said top face located near said entrance opening;
  - a trapping means situated on said bottom face;
  - a handle attached to said bottom face and passing through said aperture, wherein operation of said handle closes said entrance opening, a viewing opening in said top face, and a translucent window adhesively attached to the periphery of said viewing opening in said top face.
  2. A disposable rodent trapping device as recited in claim 1, further comprising:

an end face, connected to said top face and said bottom face in opposite relation to said entrance opening.

3. A disposable rodent trapping device as recited in claim 2, wherein:

said handle is a string fixedly attached at one end to said bottom face and terminating into a loop at its opposite end.

4. A disposable rodent trapping device as recited in claim 3, wherein:

said aperture in said top face is reinforced.

5. A disposable rodent trapping device as recited in claim 4, wherein:

said housing is opaque except for said translucent window in said top face.

6. A disposable rodent trapping device as recited in claim 5, said housing further comprising:

at least two oppositely situated side faces, attached to said top face, bottom face, and said end face in such a fashion that said entrance opening is formed integrally therefrom.

\* \* \* \* \*



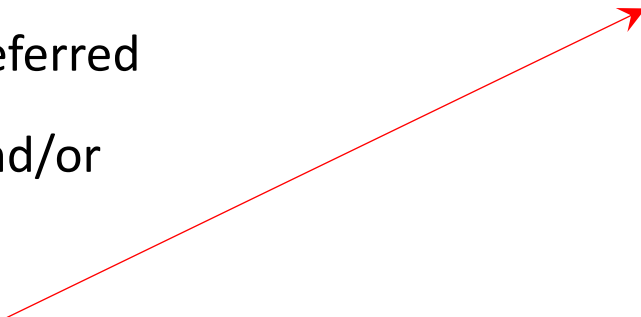
# Anatomy of a Patent

- **Inventor(s)**
  - Title
  - Abstract
  - Background
  - Summary
  - Brief Description of Drawings
  - Detailed Description
    - Description of the Preferred Embodiment
    - Examples (working and/or prophetic)
  - **Claims**
- Specification



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  - Examples (working and/or prophetic)
- **Claims**
  - Preamble + **Transition** + Body
  - Typically listed in order of increased specificity

- 
- “Comprising” = includes X & Y
    - “open” claim
    - will read on X & Y & Z
  - “Consisting essentially of” = X & Y & anything else that does not change the essential function or properties of the invention
    - Will read on X & Y & Z iff Z is unimportant to function
  - “Consisting” = contains X & Y and nothing more
    - “closed” claim
    - Will not read on X & Y & Z





# Anatomy of a Patent

- **Inventor(s)** → [Askew W. Gatewood, Jr.](#)
- Title
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# Anatomy of a Patent

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- **Title** → **Disposable rodent trap**
- Abstract
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- Summary
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- Detailed Description
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  - Examples (working and/or prophetic)
- **Claims**



# Anatomy of a Patent

- **Inventor(s)**
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- **Abstract** → This invention relates to an adhesive type rodent trap that is disposable and has an opaque housing with a window, preventing unintended view of the trapped rodent but allowing quick intended viewing for checking if the trap is occupied. The trap further includes an entrance and a handle for closing the entrance to the trap and carrying the trap.
- **Background**
- **Summary**
- **Brief Description of Drawings**
- **Detailed Description**
  - Description of the Preferred Embodiment
  - Examples (working and/or prophetic)
- **Claims**



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Disposing of a trapped mouse or rodent is an extremely unpleasant task. If caught in a conventional spring loaded trap, the rodent is usually killed upon triggering the trap, however, the force of the spring has a tendency to break the mouse's skin and expose blood and possibly some internal organs. If, on the other hand, the mouse is caught in the newer sticky type trap, it is usually still alive and violently twisting while struggling to free itself, to the point where limbs become broken, deformed and possibly separated. Thus, disposing of a rodent caught in a spring loaded trap is dirty, smelly if not recently discovered, and potentially hazardous, while disposal of a rodent caught in the sticky-type trap can be quite inhumane as the person disposing of the deformed, whimpering mouse must observe its agony as he or she grasps the edge of the trap....



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What is needed to cure the deficiencies inherent in the sticky type trap is a disposable, substantially oblique housing for the trap. The trap additionally should have a small window to check for occupancy and a handle providing a closure means as well as a carrying means for the housing. A trap such as this would thereby prevent direct vision of the trapped mouse or rodent. The new trap should also be constructed inexpensively so that the disposability of the trap is economically feasible. The present invention fulfils these and other considerations not addressed in the prior art.



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This invention is a substantial improvement to existing sticky type mouse and rodent traps. Instead of having an exposed tray of trapping adhesive, as commonly used today, this invention encloses the area of adhesive within an opaque housing, thereby preventing feet, small children, or even the ear of a napping dog from becoming accidentally attached. The housing, while preventing inadvertent attachment, additionally provides a shield precluding a person from directly looking at or incidentally touching the trapped rodent while disposing of the trap. While the housing of the trap is opaque to prevent unintended viewing of the trapped animal, a small section is translucent, allowing the trap to be periodically checked so a trapped rodent can be disposed of quickly....



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To further assist in disposing of the trap, the housing is only open on a single side, with its open side containing a drawstring type handle. Thus, the disposer can merely pull the handle and the open side of the housing will close, encasing the trapped rodent within the housing of the trap.

It is therefore an object of this invention to provide a trap which is inexpensive and disposable.

It is a further object of this invention to provide a trap which is concealed within a substantially opaque housing to prevent unintended viewing of a trapped rodent.

It is still another object of this invention to provide a trap which has a small viewing portion to visually check if the trap has caught a rodent and is in need of disposal.

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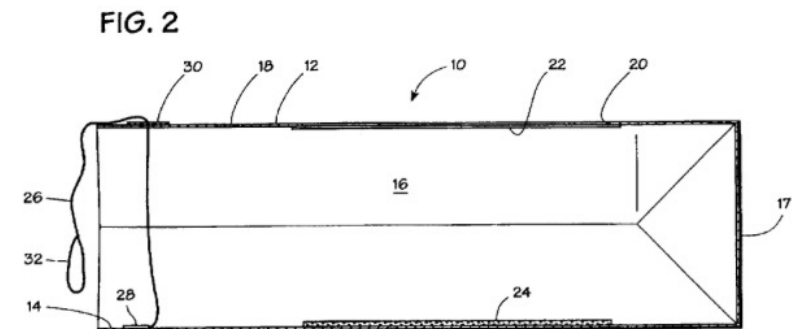
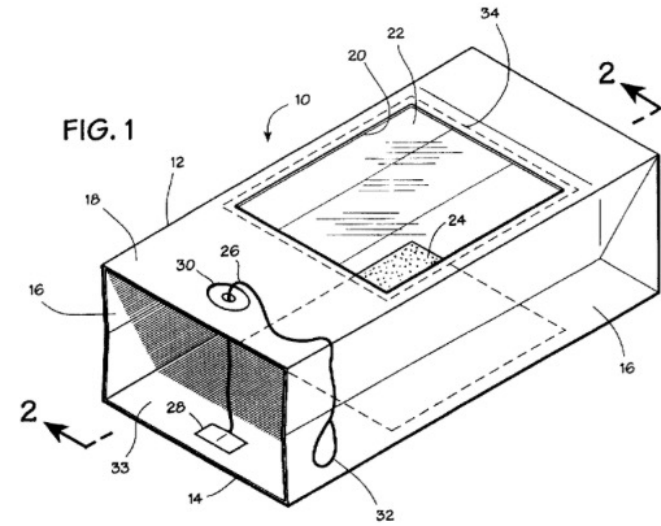
It is yet another object of this invention to protect unintended animals and people from become accidentally adhered to the trap.

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FIG. 1 is a isometric view of the rodent trap illustrating the novel features of the invention.

FIG. 2 is a right side cross section of the rodent trap shown in FIG. 1.





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Referring to FIGS. 1 and 2, the general trap 10 is illustrated in isometric perspective and right side cross section, respectively. The trap housing 12 is shown comprising two opposed vertical side faces 16, a top face 18, a bottom face 14 opposing the top face 18, and an enclosing end face 17. These faces in tandem creating an entrance opening 33 opposite the enclosing end face 17. The housing may be constructed out of any lightweight flexible material, such as TYVAK™, and preferably is shaped substantially similar to a typical brown paper lunch bag. The faces of the housing 12 are assembled either by precision folding secured with adhesive, as a paper bag is constructed, or are sewn at the seams. The material must, however, be rigid enough to stand open on its own when assembled and resting on its bottom face 14....





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While the exterior of the bottom face 14 rests against the floor, the interior face contains the trapping adhesive 24. The adhesive 24 can be any type that is sufficiently tacky enough to restrain and confine the specific rodent intended to be trapped. The adhesive 24 is preferably placed either in the center or close to the rear of the bottom face 10, assuring that a trapped rodent is not visibly extending outwardly through the entrance opening 33. The area of adhesive 24 can be an existing trap slid into the housing or preferably, is incorporated directly within the bottom face 14 of the trap 10.

The top face 18 includes a translucent viewing window 22, preferably located in an opening 20 directly above the adhesive trapping area 24 and being similar in shape and area. The window is attached to the opening 20 of the top face 18 by a strip of adhesive or a line of stitching 34.

This window 22 allows for visual checking of the adhesive area 24 to see if a rodent is attached. Thus, viewing of a trapped rodent is quick with the limited purpose and duration of checking the trap 10 for occupancy. If the trap 10 is occupied, it can then be disposed of without further viewing of the trapped rodent....



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The window 22 also has a function when the trap is not being used. It acts as a cover for the adhesive area 24 when the trap is folded flat, either by fully covering it or by covering a raised portion about its periphery, limiting the amount of window 22--adhesive area 24 contact to that which is completely necessary.

Disposal of the trap 10 is quite simple due to the inclusion of a draw string type closing and carrying handle 26. This handle 26 is located near the entrance opening 33, attached to the bottom face 14 and passing through the top face 18 via a reinforced aperture 30. The handle 26 is constructed from an inexpensive elongated strand, preferably string. It is attached to the interior of the bottom face by an attaching means 28, either tape or cross stitching. The string handle 26 extends upward, through the reinforced orifice 30, and terminates into a small loop 32, facilitating both pulling and carrying. Therefore, when the loop 32 of the handle 26 is pulled, the bottom face 14 and the top face 18 converge upon each other, substantially sealing the entrance opening 33, thereby closing the trap housing 12, encasing the rodent within. The handle 26 is then used to carry the trap to a proper disposal place, and a new trap is set to capture additional rodents....



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While the preceding description is the preferred and best embodiment of the invention, slight variations can be incorporated without deviating outside the spirit or scope of the claims or contemplation of the inventor.



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- Claims

I claim:1. A disposable rodent trapping device, comprising: [A] a substantially lightweight and flexible housing having [1] a bottom face, [2] a top face, [3] an entrance opening in said housing for said rodent, and [4] an aperture in said top face located near said entrance opening; [B] a trapping means situated on said bottom face; [C] a handle attached to said bottom face and passing through said aperture, wherein operation of said handle closes said entrance opening, [D] a viewing opening in said top face, and [E] a translucent window adhesively attached to the periphery of said viewing opening in said top face.

2. A disposable rodent trapping device as recited in claim 1 [A+B+C+D+E], further comprising: [F] an end face, connected to said top face and said bottom face in opposite relation to said entrance opening.

3. A disposable rodent trapping device as recited in claim 2 [A+B+C+D+E+F], wherein: [G] said handle is a string fixedly attached at one end to said bottom face and terminating into a loop at its opposite end....



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4. A disposable rodent trapping device as recited in claim 3 [A+B+C+D+E+F+G], wherein; [H] said aperture in said top face is reinforced.

5. A disposable rodent trapping device as recited in claim 4 [A+B+C+D+E+F+G+H], wherein: [I] said housing is opaque except for said translucent window in said top face.

6. A disposable rodent trapping device as recited in claim 5 [A+B+C+D+E+F+G+H+I], [J] said housing further comprising: at least two oppositely situated side faces, attached to said top face, bottom face, and said end face in such a fashion that said entrance opening is formed integrally therefrom.



## Map showing the geographic coverage of European patents as of 1 October 2022

### ■ Member states (39)

- |                  |                   |                  |
|------------------|-------------------|------------------|
| - Albania        | - Hungary         | - Norway         |
| - Austria        | - Iceland         | - Poland         |
| - Belgium        | - Ireland         | - Portugal       |
| - Bulgaria       | - Italy           | - Romania        |
| - Croatia        | - Latvia          | - San Marino     |
| - Cyprus         | - Liechtenstein   | - Serbia         |
| - Czech Republic | - Lithuania       | - Slovakia       |
| - Denmark        | - Luxembourg      | - Slovenia       |
| - Estonia        | - Malta           | - Spain          |
| - Finland        | - Monaco          | - Sweden         |
| - France         | - Montenegro      | - Switzerland    |
| - Germany        | - Netherlands     | - Turkey         |
| - Greece         | - North Macedonia | - United Kingdom |

### ■ Extension states (1)

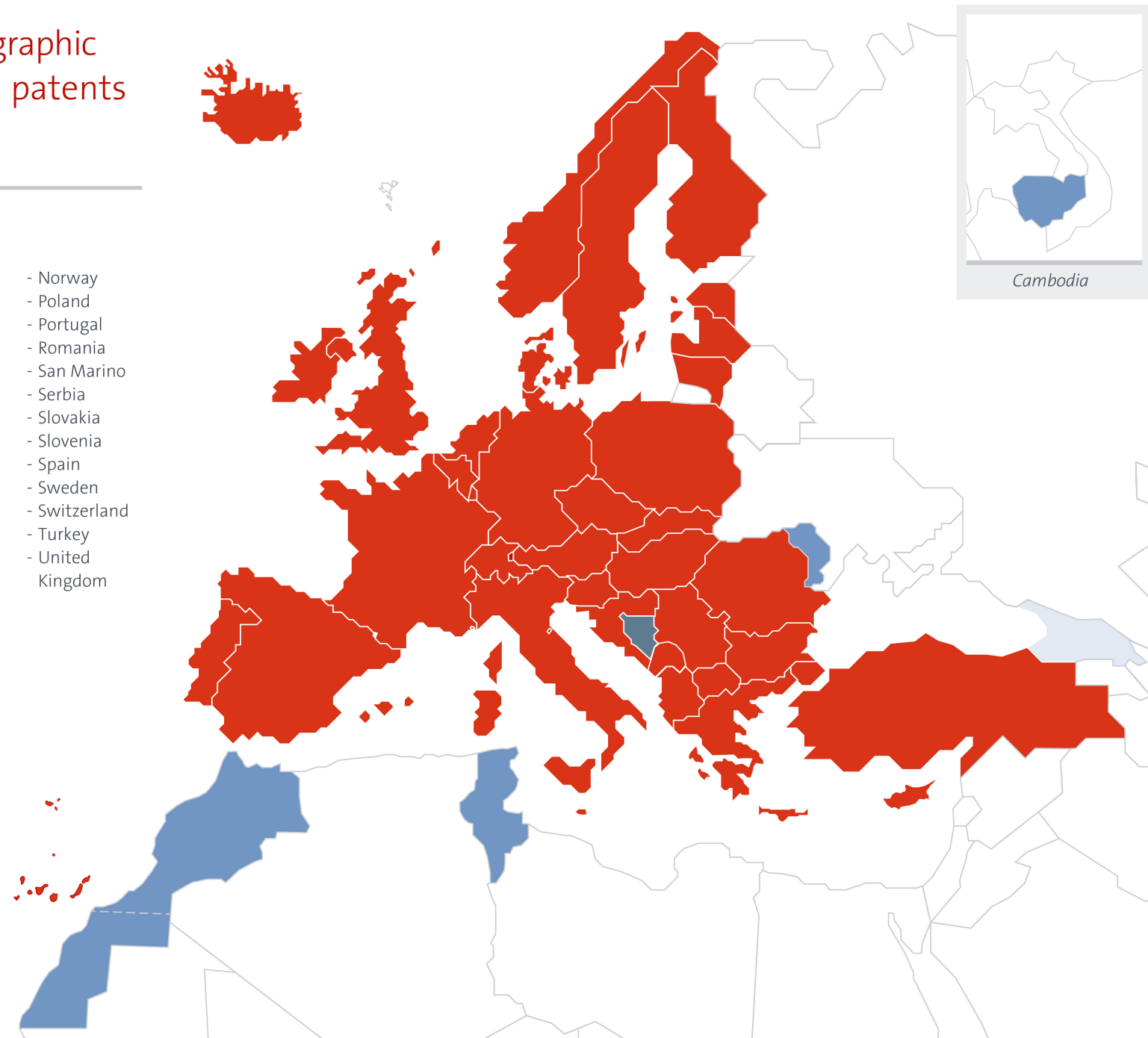
- Bosnia and Herzegovina

### ■ Validation states (4) *Agreement in force*

- Cambodia
- Republic of Moldova
- Morocco
- Tunisia

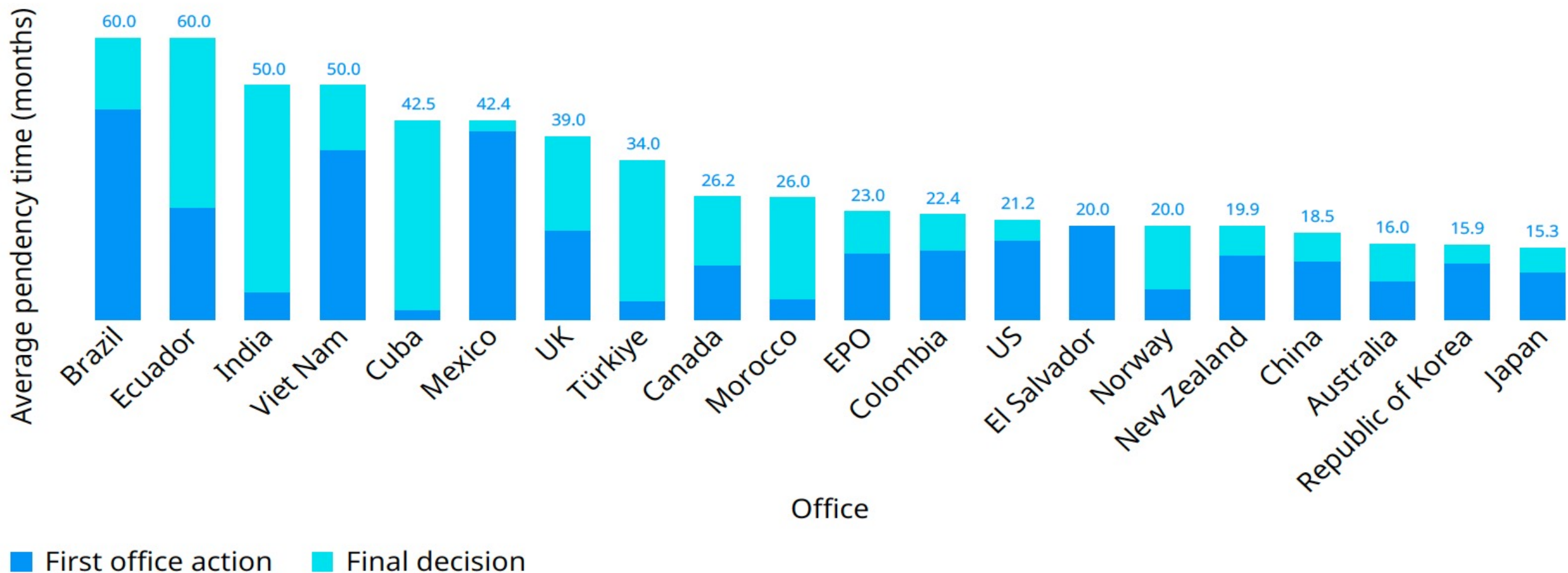
### ■ Future validation states (1) *Agreement signed but not in force yet*

- Georgia





### A43. Average pendency times for first office action and final decision at selected offices, 2021



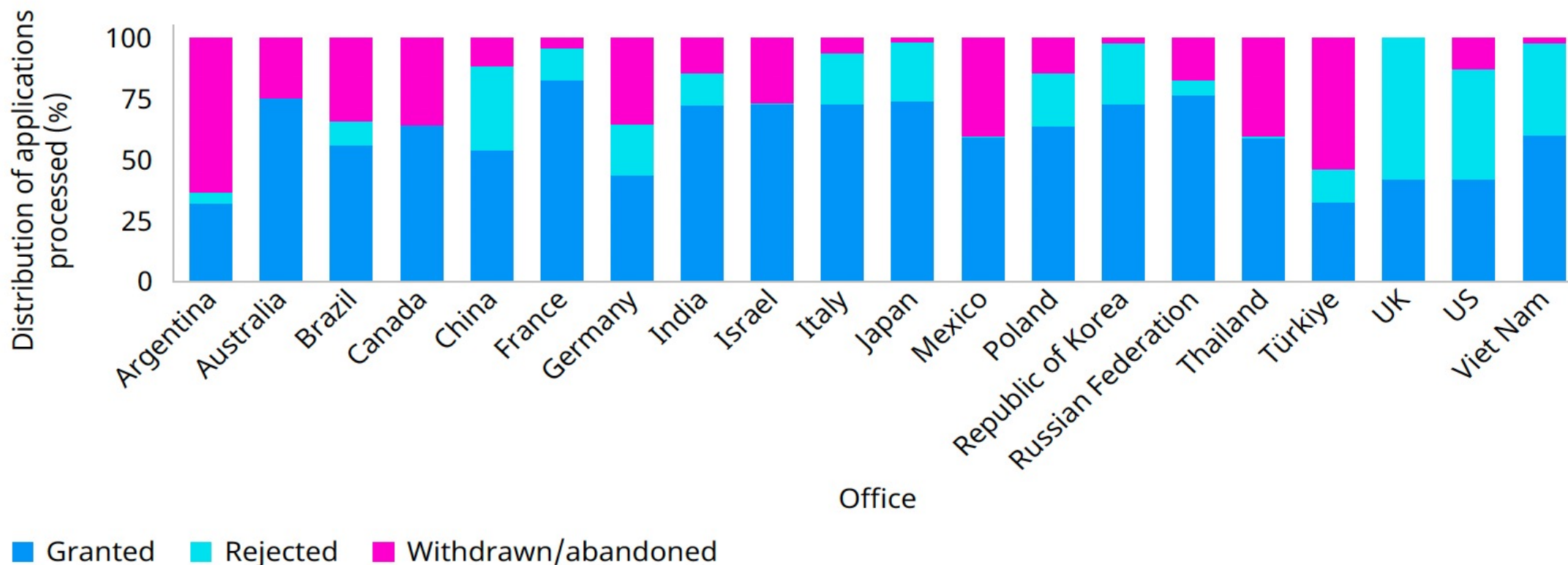
Note: EPO is the European Patent Office. WIPO collects data from IP offices using a common questionnaire and methodology. However, due to differences in patent procedures between offices, data cannot be fully harmonized. Therefore, caution should be exercised when making comparisons across offices.

Source: WIPO Statistics Database, September 2022.



# Patent office procedural data

## A41. Distribution of patent examination outcomes for selected offices, 2021

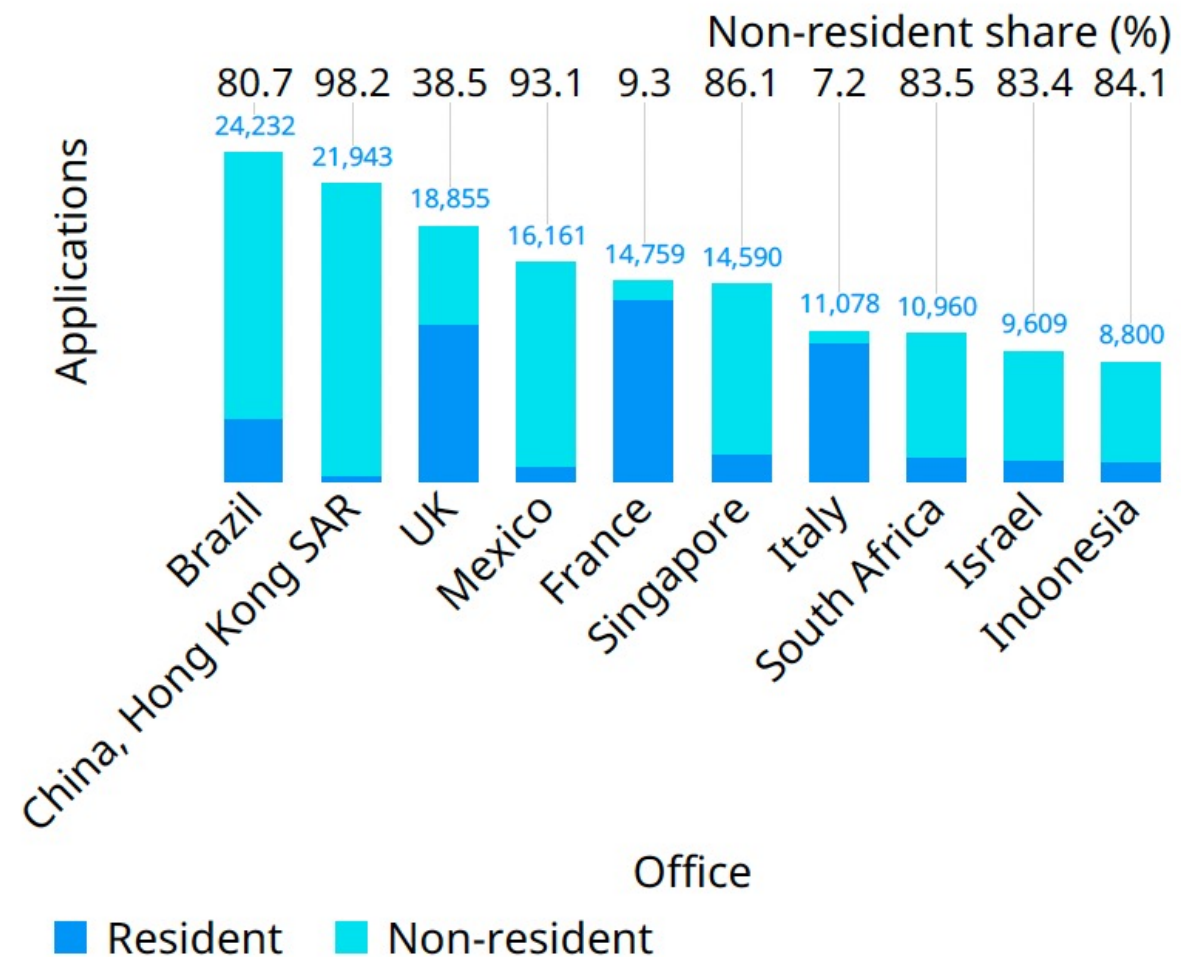
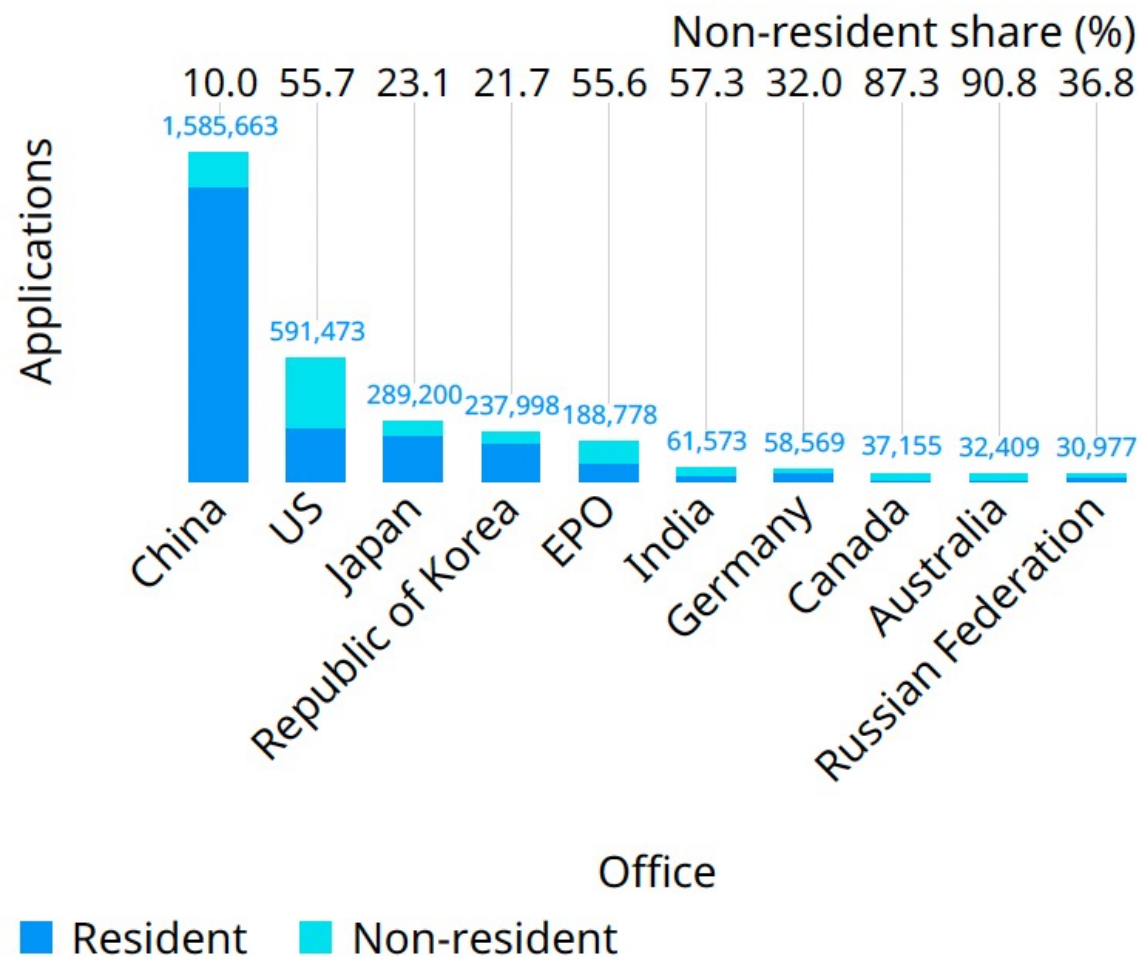


Note: The share of applications granted should not be interpreted as grant rates, as they are based on the examination date rather than the date when the application was filed. The number of grants in a given year relates to applications filed in previous years. WIPO collects data from IP offices using a common questionnaire and methodology. However, due to differences in patent procedures between offices, data cannot be fully harmonized. Therefore, caution should be exercised when making comparisons across offices.

Source: WIPO Statistics Database, September 2022.



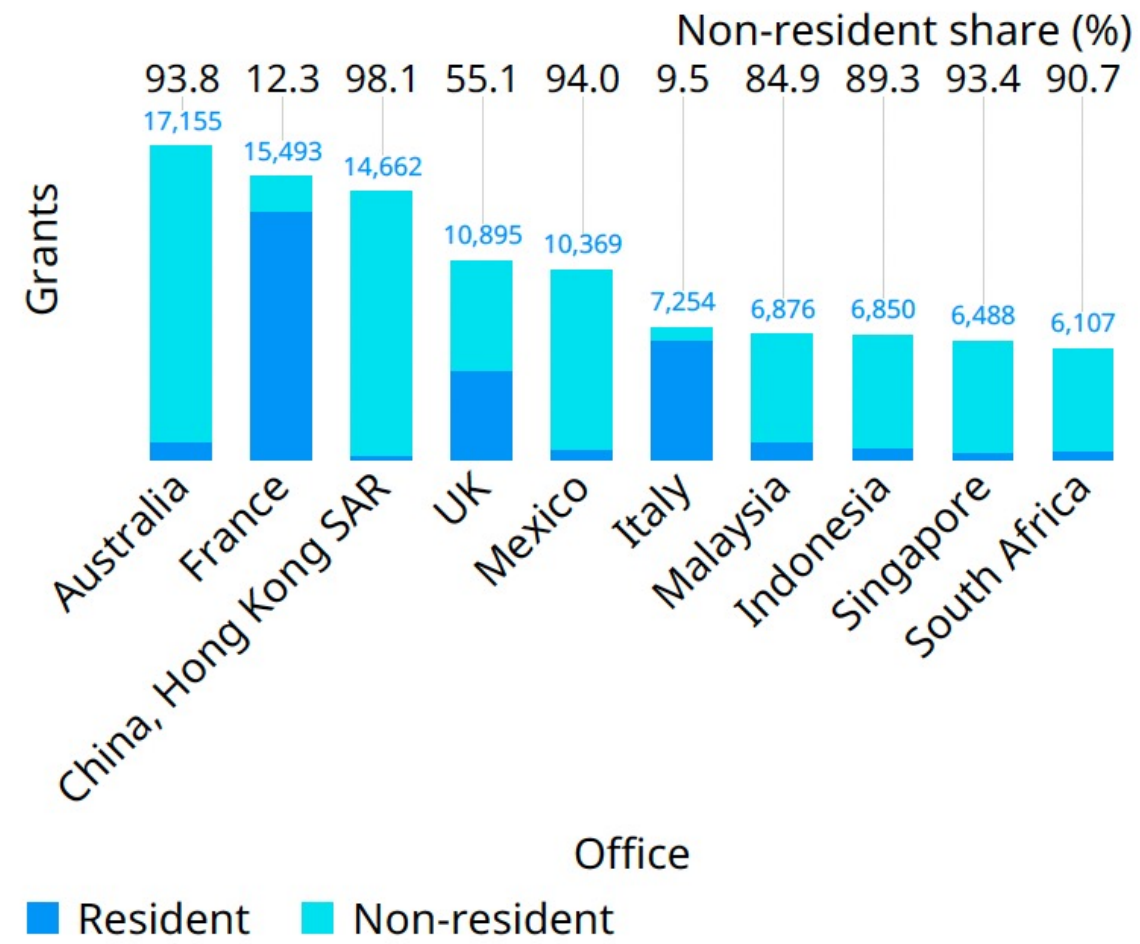
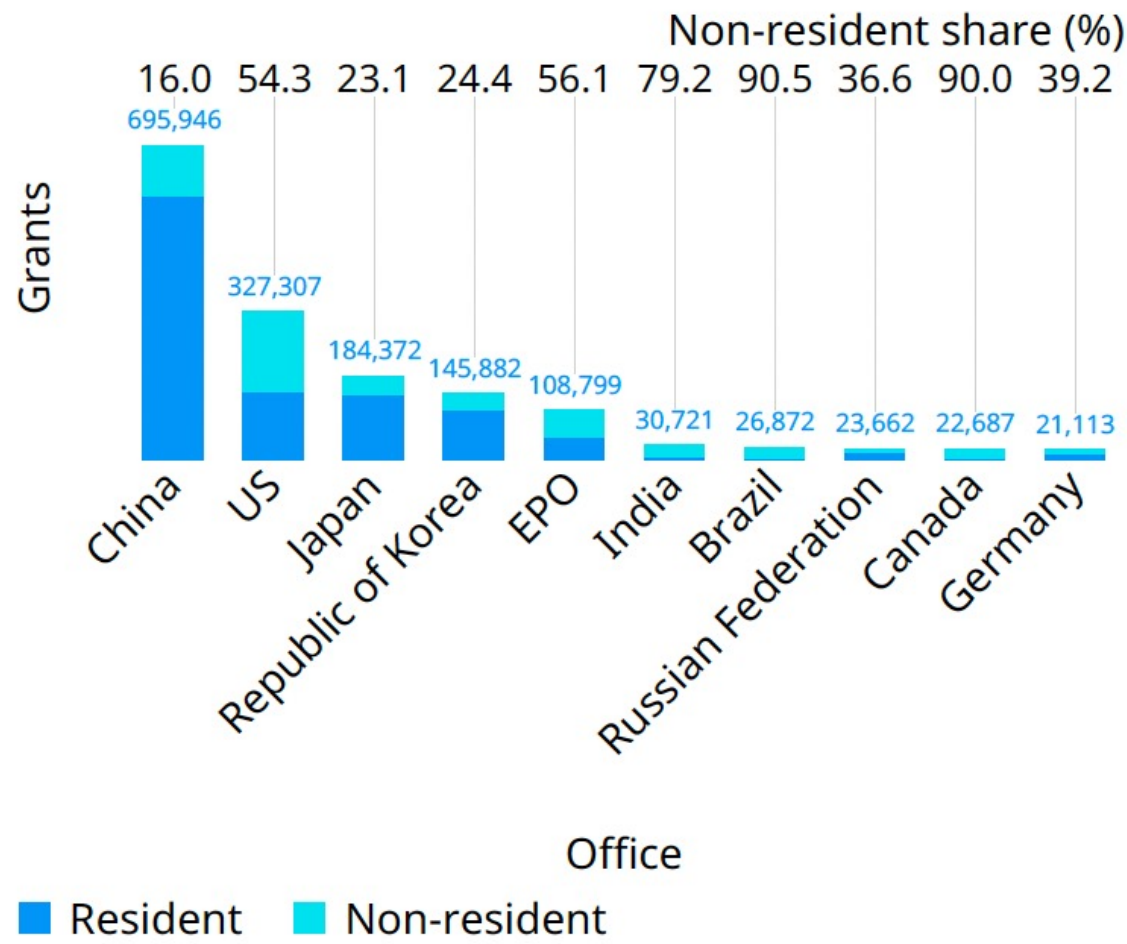
## A7. Patent applications at the top 20 offices, 2021



Note: EPO is the European Patent Office. In general, national offices of the EPO member states receive lower volumes of applications, because applicants may apply via the EPO to seek protection within any EPO member state.

Source: WIPO Statistics Database, September 2022.

# A13. Patent grants for the top 20 offices, 2021

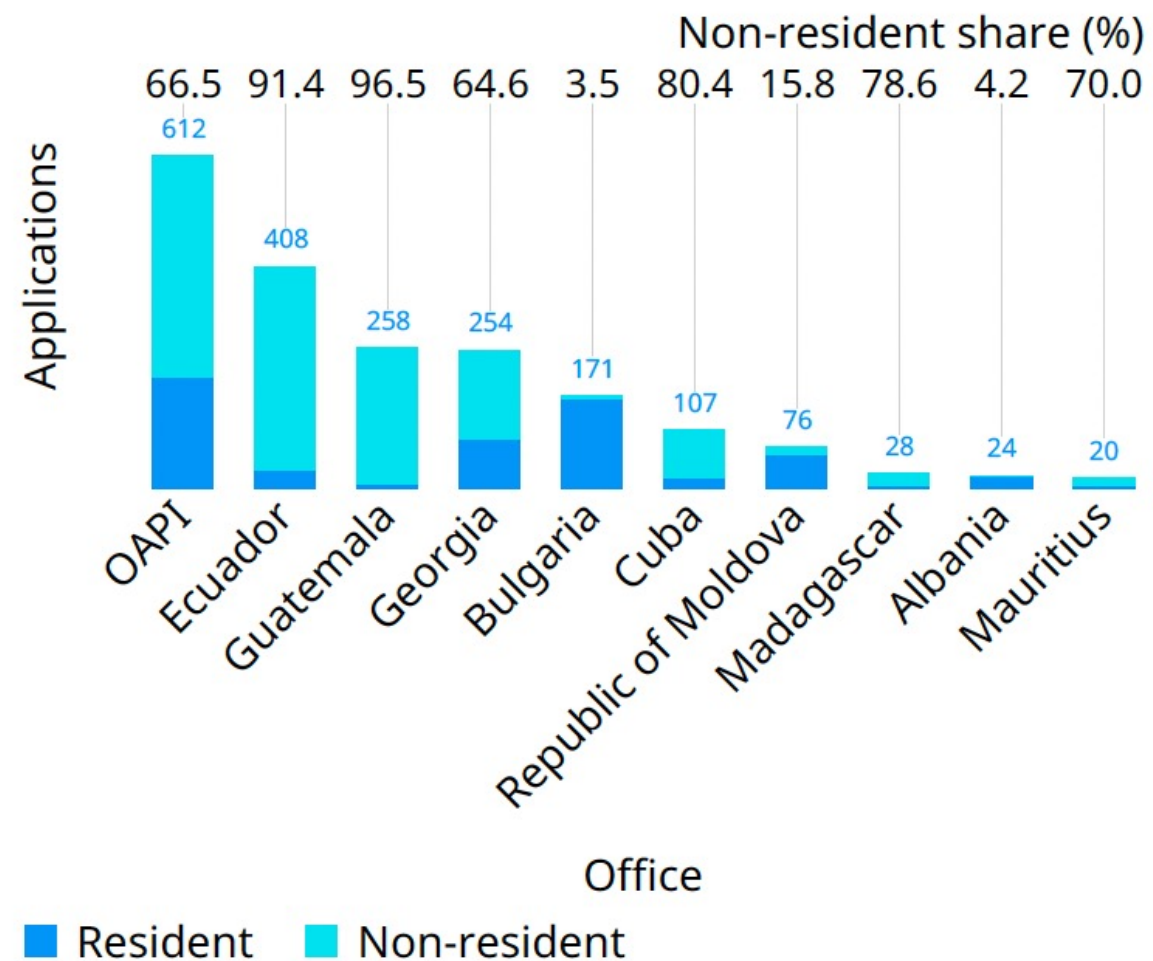
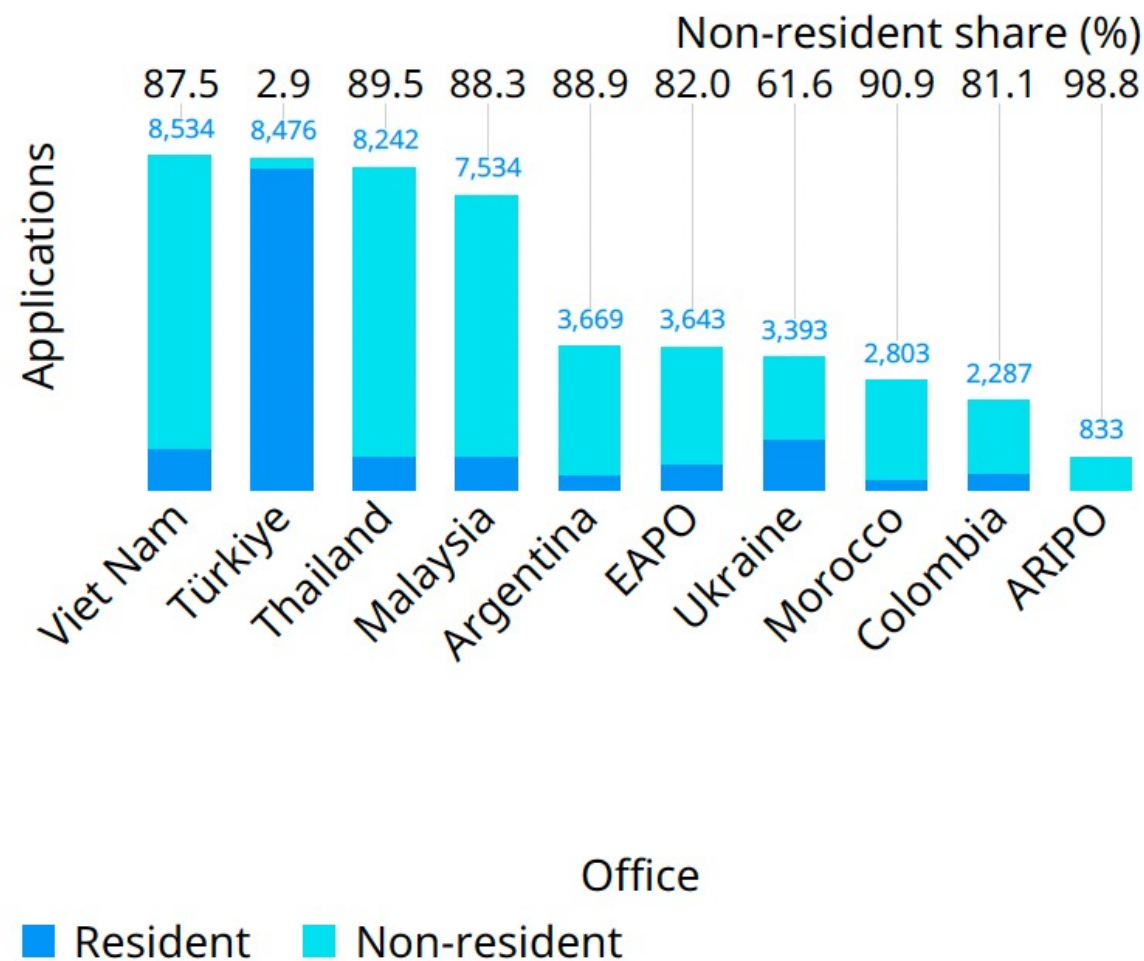


Note: EPO is the European Patent Office. The procedure for issuing patents varies between offices, and differences in the numbers of patents granted among offices depend on factors such as examination capacity and procedural delays. The examination process can take a long time therefore there is invariably a time lag between application and grant dates. For this reason, data on applications for a given year should not be compared with data on grants for the same year.

Source: WIPO Statistics Database, September 2022.



## A9. Patent applications at offices of selected low- and middle-income countries, 2021

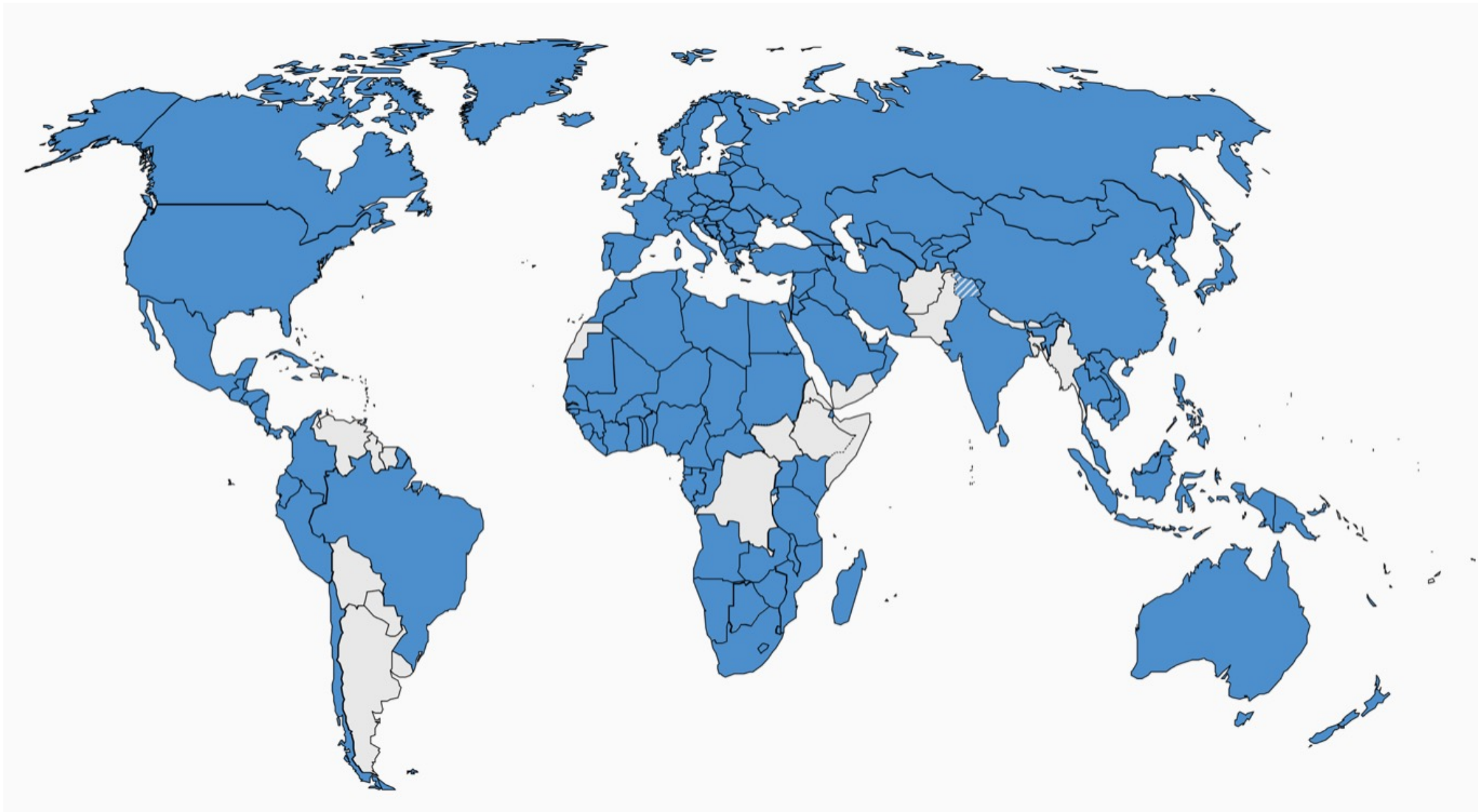


Note: ARIPO is the African Regional Intellectual Property Organization, EAPO is the Eurasian Patent Organization and OAPI is the African Intellectual Property Organization. The selected offices are from different world regions. Where available, data for all offices are presented in table A53.

Source: WIPO Statistics Database, September 2022.



# PCT Contracting States (157 as of 2023/01/15)



Source: [https://www.wipo.int/pct/en/pct\\_contracting\\_states.html](https://www.wipo.int/pct/en/pct_contracting_states.html)



# PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION  
International Bureau



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<b>(51) International Patent Classification <sup>6</sup> :</b> <b>A01M 1/10</b>	<b>A1</b>	<b>(11) International Publication Number:</b> <b>WO 99/03339</b> <b>(43) International Publication Date:</b> 28 January 1999 (28.01.99)
<b>(21) International Application Number:</b> PCT/US97/12233 <b>(22) International Filing Date:</b> 14 July 1997 (14.07.97)  <b>(71)(72) Applicant and Inventor:</b> GATEWOOD, Askew, W., Jr. [US/US]; 3515 Wabash Avenue, Baltimore, MD 21215-7433 (US).  <b>(74) Agent:</b> CRAIG, Royal, W.; Law Offices of Royal W. Craig, Suite 1123, 210 North Charles Street, Baltimore, MD 21201 (US).		<b>(81) Designated States:</b> CA, JP, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).  <b>Published</b> <i>With international search report.</i>



## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US97/12233

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) :A01M 1/10

US CL :43/58, 60, 61,114

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 43/58, 60, 61,114

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

none

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

none

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,577,341 A (MOLLO) 26 NOVEMBER 1996	
A	US 5,175,956 A (HOVER, SR. ET AL) 05 JANUARY 1993	
A	US 4,425,731 A (ORLANDO) 17 JANUARY 1984	
A	US 1,112,064 A (GORDON) 29 SEPTEMBER 1914	
A	US 1,029,001 A (FINGERHUT) 11 JUNE 1912	

 Further documents are listed in the continuation of Box C.  See patent family annex.

* Special categories of cited documents:	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
*A* document defining the general state of the art which is not considered to be of particular relevance	*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
*B* earlier document published on or after the international filing date	*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
*L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*G* document member of the same patent family
*O* document referring to an oral disclosure, use, exhibition or other means	
*P* document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

25 SEPTEMBER 1997

Date of mailing of the international search report

15 OCT 1997

Name and mailing address of the ISA/US

Commissioner of Patents and Trademarks  
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Washington, D.C. 20231

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Reading RG1 8EQ  
Berkshire  
GRANDE BRETAGNE



Datum/Date

29/08/02

Zeichen/Ref./Réf. FPW/P84226 EP	Anmeldung Nr./Application No./Demande n°/Patent Nr./Patent No./Brevet n°. 97932597.4-2313 0999741
Anmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire Gatewood, Askew W., Jr.	

DECISION TO GRANT A EUROPEAN PATENT PURSUANT TO ARTICLE 97(2) EPC

Following examination of European patent application No. 97932597.4 a European patent with the title and the supporting documents indicated in the communication pursuant to Rule 51(4) EPC dated 07.12.01 is hereby granted in respect of the designated Contracting States. Any modifications which were subsequently requested have been approved by the Examining Division. Any corrections requested by the applicant after receipt of the communication under Rule 51(6) and received at the EPO on 00.00.00 have been taken into account.

Patent No. : 0999741  
Date of filing : 14.07.97  
Priority claimed :  
Designated Contracting States and Proprietor(s) : AT-BE-DE-ES-FR-GB-GR-IE-IT-LU-NL-PT  
Gatewood, Askew W., Jr.  
3515 Wabash Avenue  
Baltimore, MD 21215-7433/US

This decision will take effect on the date on which the European Patent Bulletin mentions the grant (Art. 97(4) and (5) EPC).

The mention of the grant will be published in European Patent Bulletin 02/41 of 09.10.02.

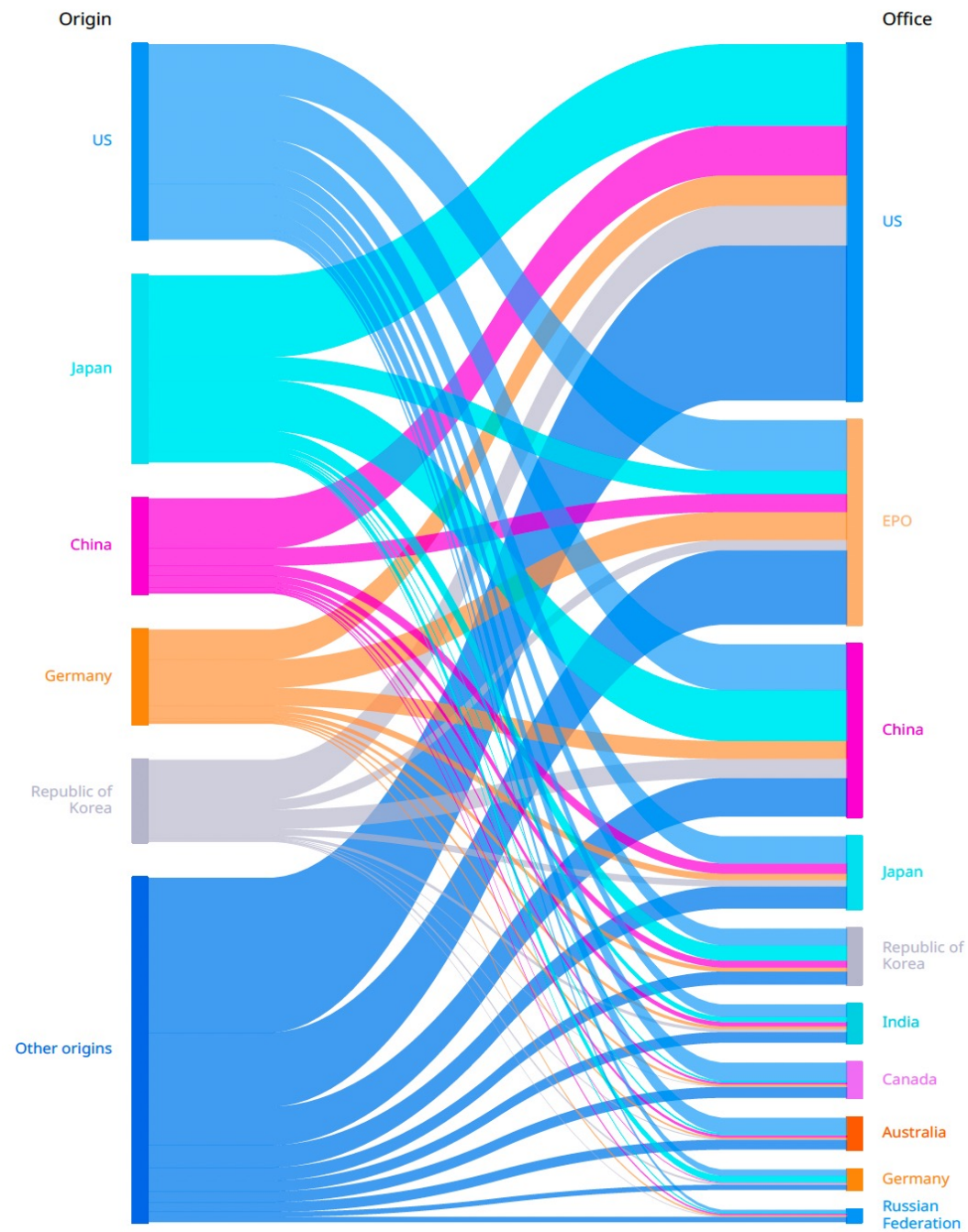
Examining Division  
KOCK S Z MARZANO MONTEROSSO M CARDAN C



Registered letter



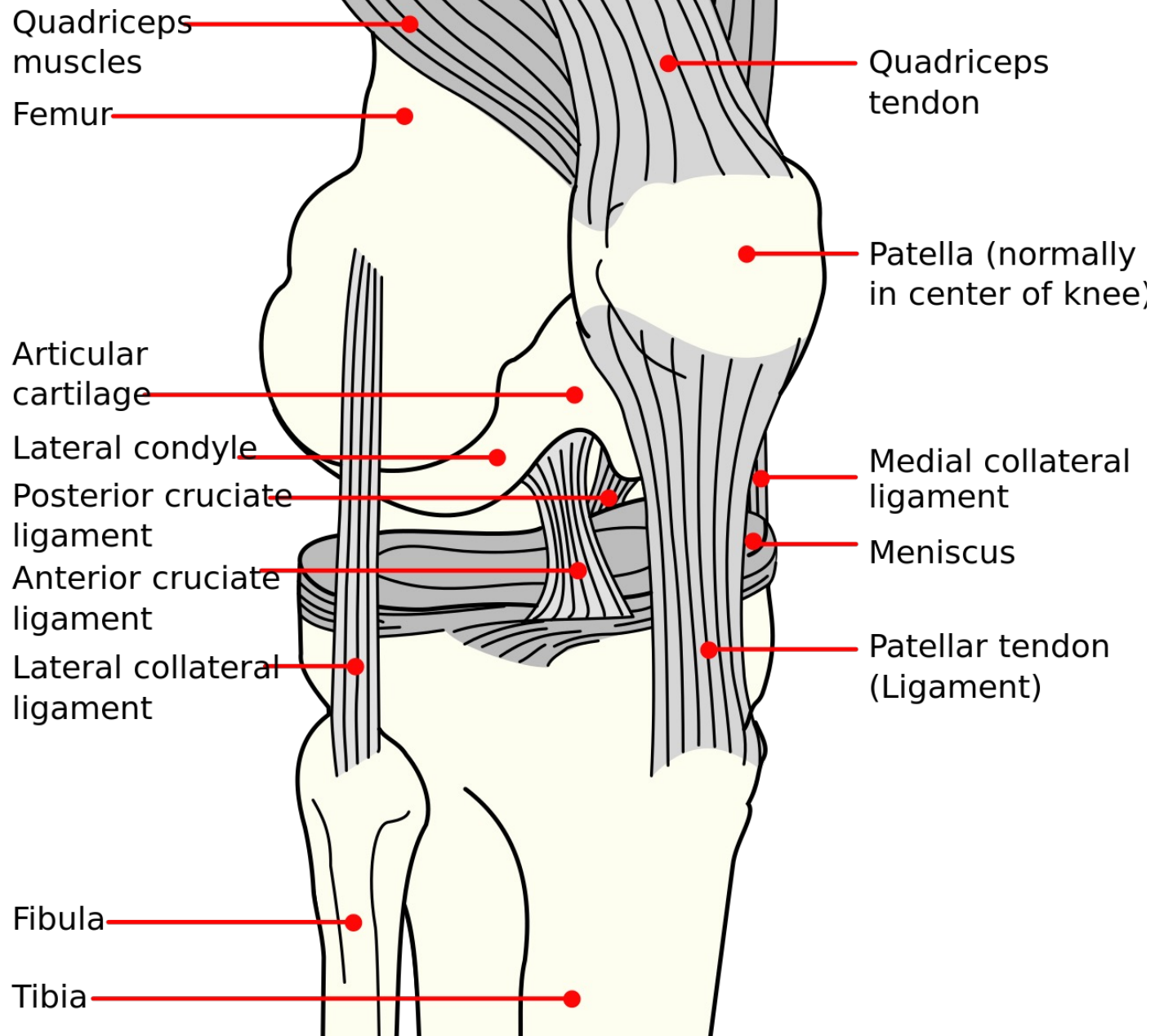
A19. Flows of non-resident patent applications between the top five origins and the top 10 offices, 2021





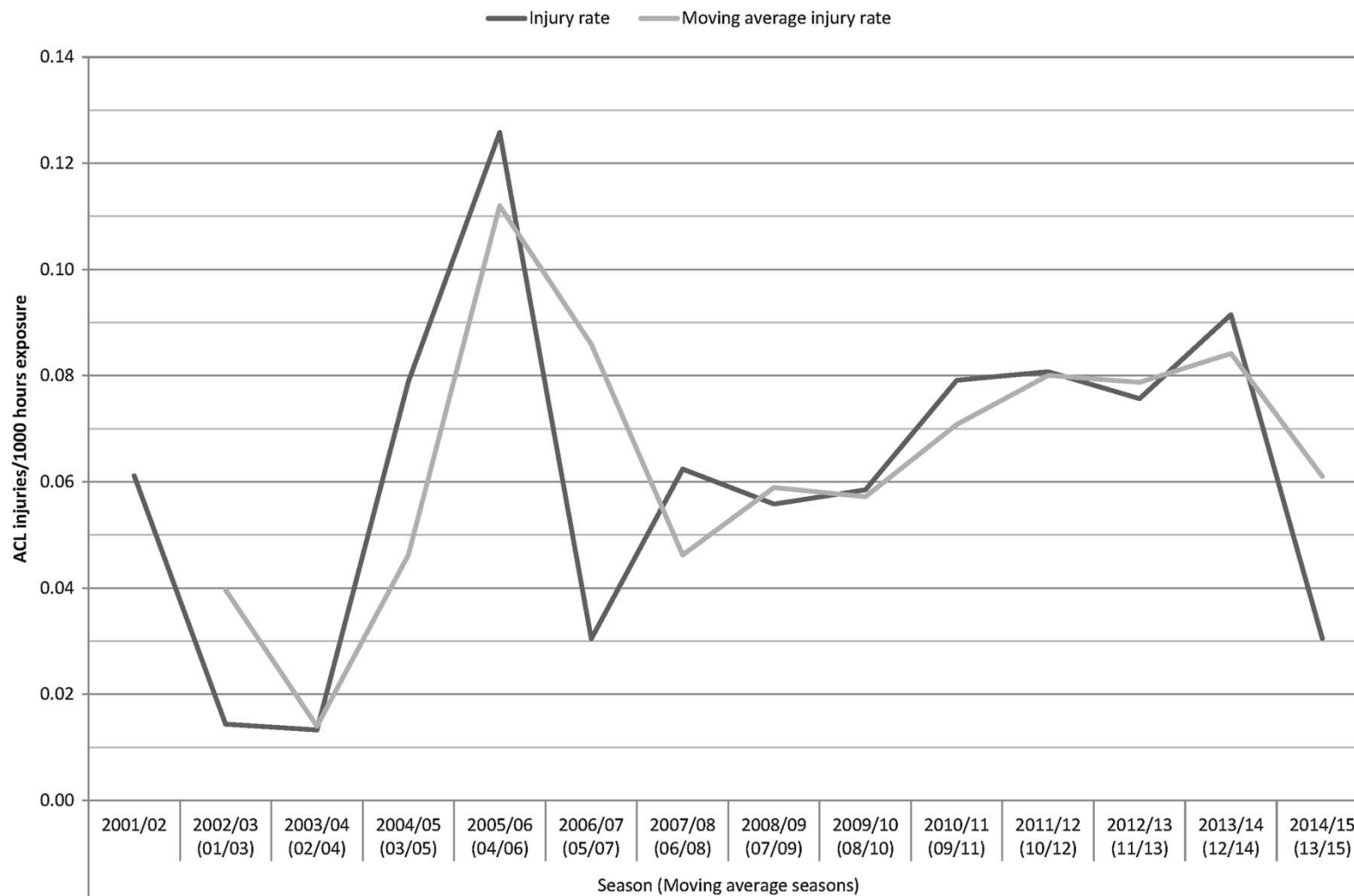


## Section B: Exploiting a Patent





## Seasonal trend for the ACL injury rate in male professional football players from 2001 to 2015.



Markus Waldén et al. *Br J Sports Med* 2016;50:744-750





# DonJoy Armor Knee Support Brace with FourcePoint Hinge: Standard Calf Length, Right Leg, X-Large by DonJoy

★★★★★ | 5 customer reviews | 10 answered questions



## About the product

- Treat or prevent moderate to severe ACL, MCL, and LCL instabilities, recovery from ACL reconstructions, and hyperextension prevention
- Combines DonJoy's proven 4-Points-of-Leverage System, along with patented FourcePoint hinge technology
- Designed for athletes involved in extreme or contact sports, who don't want to sacrifice speed

Price: **\$496.32** ✓prime

FREE Delivery **Thursday, Sept. 27 - Wednesday, Oct. 17** [Details](#)

Usually ships within 1 to 2 months. Ships from and sold by Amazon.com.

2 Styles: Standard Calf Length, Right Leg



\$519.99 ✓Prime



\$496.32 ✓Prime

5 Sizes: X-Large

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\$549.99

Medium

\$549.99 ✓Prime

X-Large

\$496.32 ✓Prime



📍 Deliver to William - Lincoln 01773

Free Shipping for Prime members

Qty: 1 ↕



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**United States Patent**  
**Nelson , et al.**

**6,623,439**  
**September 23, 2003**

Contoured knee brace frame

### Abstract

The present invention provides an improved knee brace that is configured to improve comfort to the user and reduce interference with the natural motion of the user's leg. The knee brace has rigid upper and lower frames that are connected together by polycentric hinges. The rigid upper frame is contoured such that no rigid structure is located along the medial superior region of the thigh. The rigid upper and lower frames are secured to the leg using a plurality of straps.

**Inventors:** Nelson; Kim Alex (Salt Lake City, UT), Paulos; Lonnie E. (Salt Lake City, UT)

**Assignee:** DJ Orthopedics, LLC (Vista, CA)

**Family ID:** 25482637

**Appl. No.:** 09/945,115

**Filed:** August 31, 2001

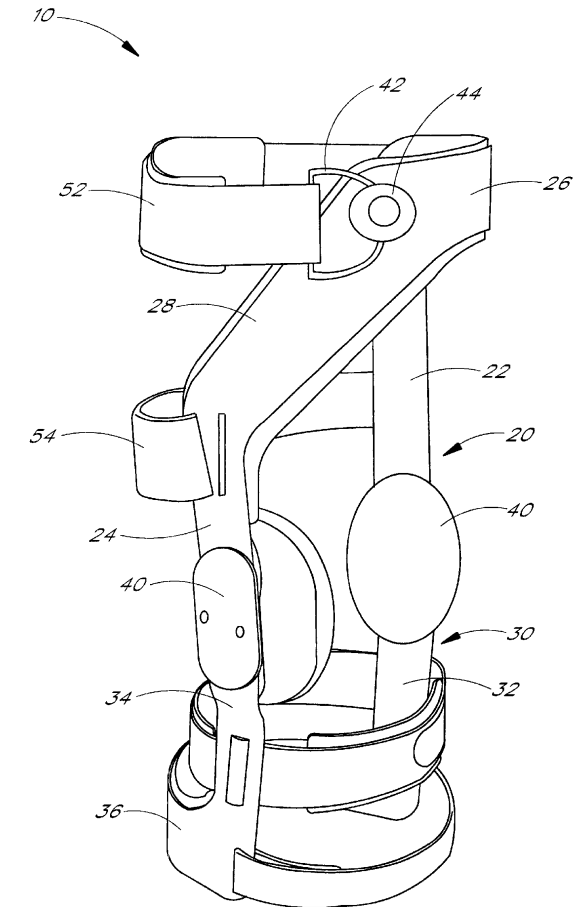


FIG. 1



Jan. 6, 1670

H. SCHWEITZER ET AL  
WIND-PROPELLED APPARATUS

3,487,800

Filed March 27, 1968

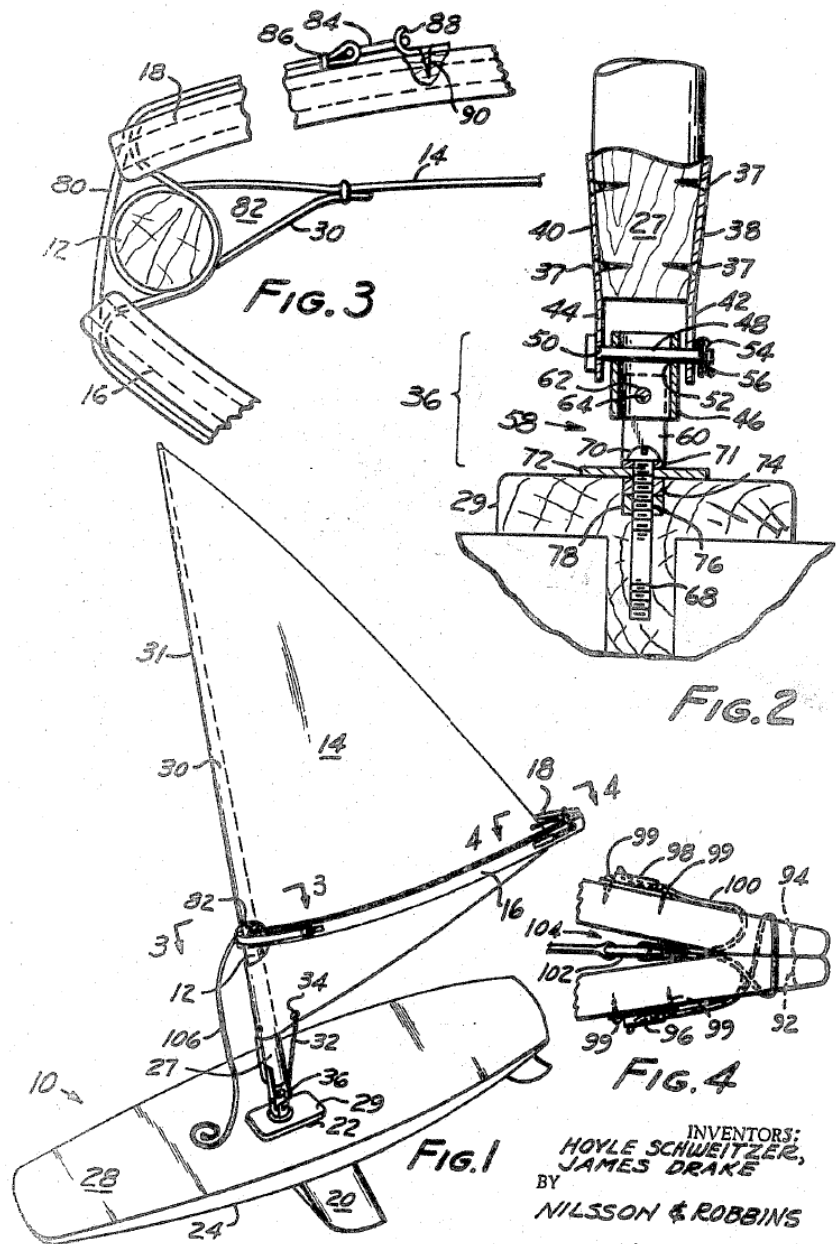


FIG. 1

FIG. 2

FIG. 3

FIG. 4

INVENTORS:  
HOYLE SCHWEITZER,  
JAMES DRAKE  
BY  
NILSSON & ROBBINS  
ATTORNEYS.

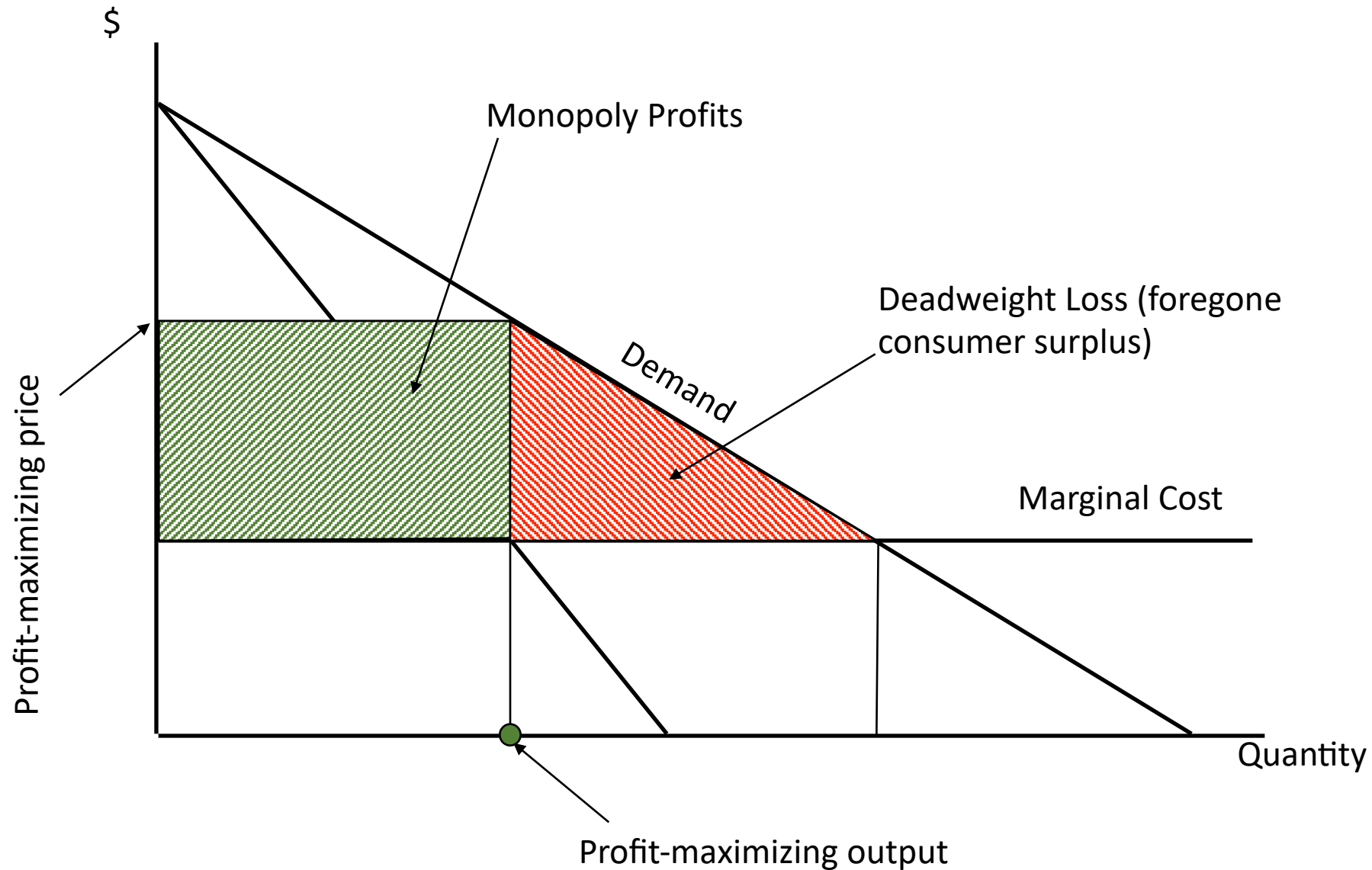
What is claimed is:

1. Wind-propelled apparatus comprising body means adapted to support a user and wind-propulsion means pivotally associated with said body means and adapted to receive wind for motive power for said apparatus, said propulsion means comprising a mast, a joint for mounting said mast on said body means, a sail and means for extending said sail laterally from said mast, the position of said propulsion means being controllable by said user, said propulsion means being substantially free from pivotal restraint in the absence of said user, said joint having a plurality of axes of rotation whereby said sail free falls along any of a plurality of vertical planes upon release by said user....



# Profit-Maximizing Behavior by a Patentee

In the absence of Price Discrimination







# Section C: Enforcing and Challenging Patents

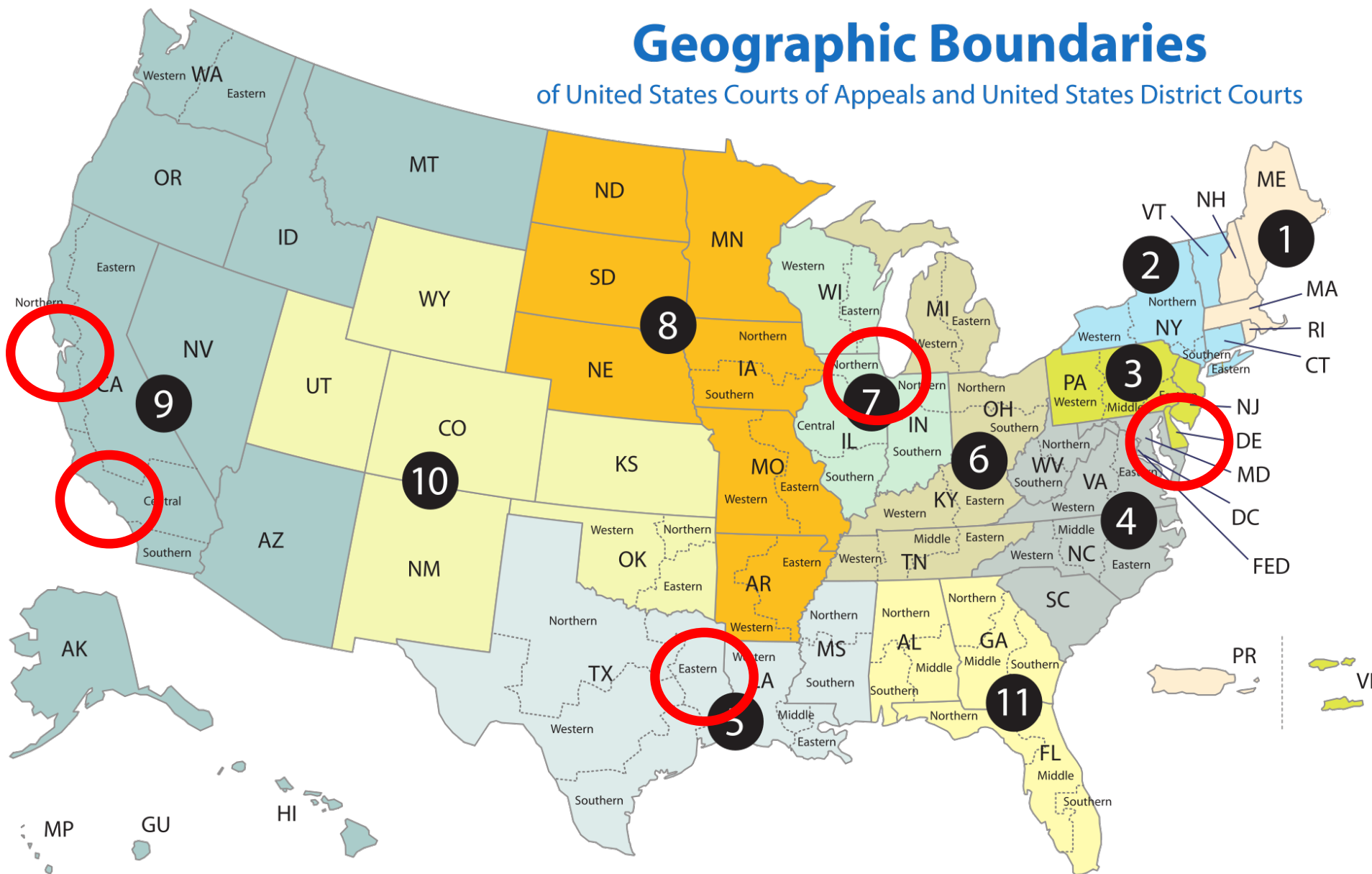
Version 3.0  
January 15, 2023





# Geographic Boundaries

of United States Courts of Appeals and United States District Courts

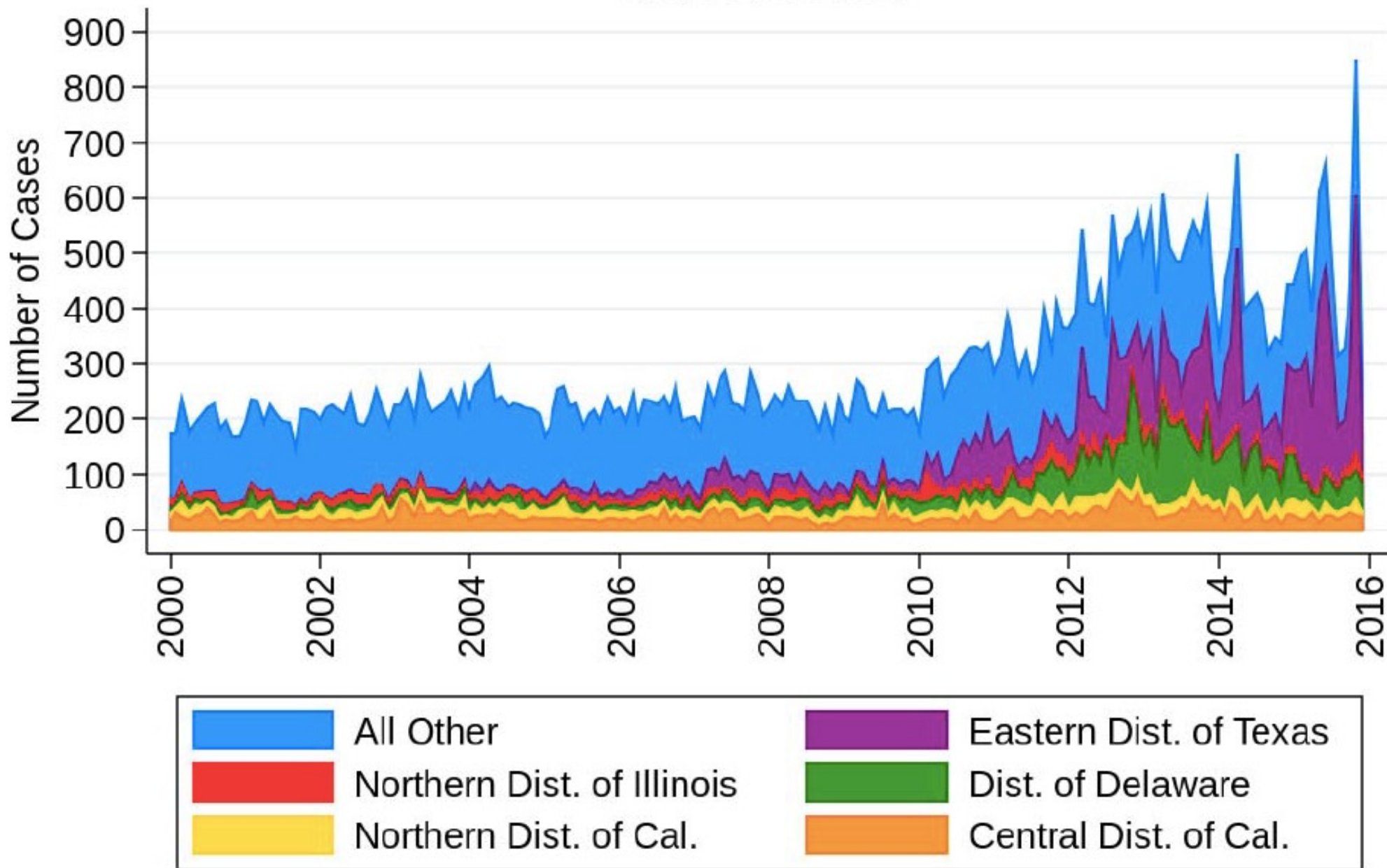


Venue is proper in any “judicial district where the defendant resides, or where the defendant has committed acts of infringement and has a regular and established place of business.”



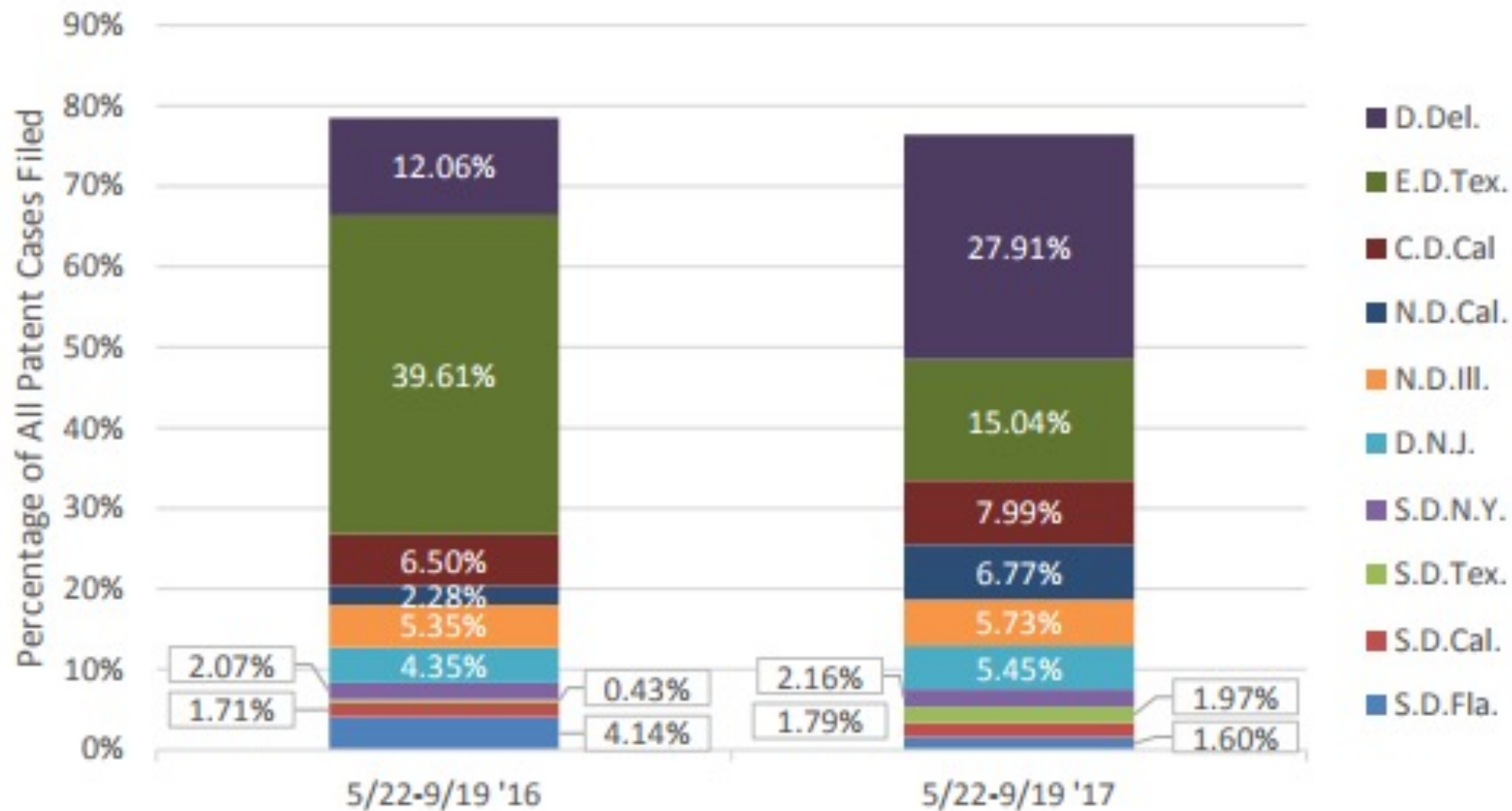
# Figure 3: Patent Litigation by Month and by Courts Years 2000-2015

Source: Marco, Tesfayesus, & Toole, "Patent Litigation Data from US District Court Electronic Records (1963-2015)," USPTO Economic Working Paper No. 2017-06, p. 31





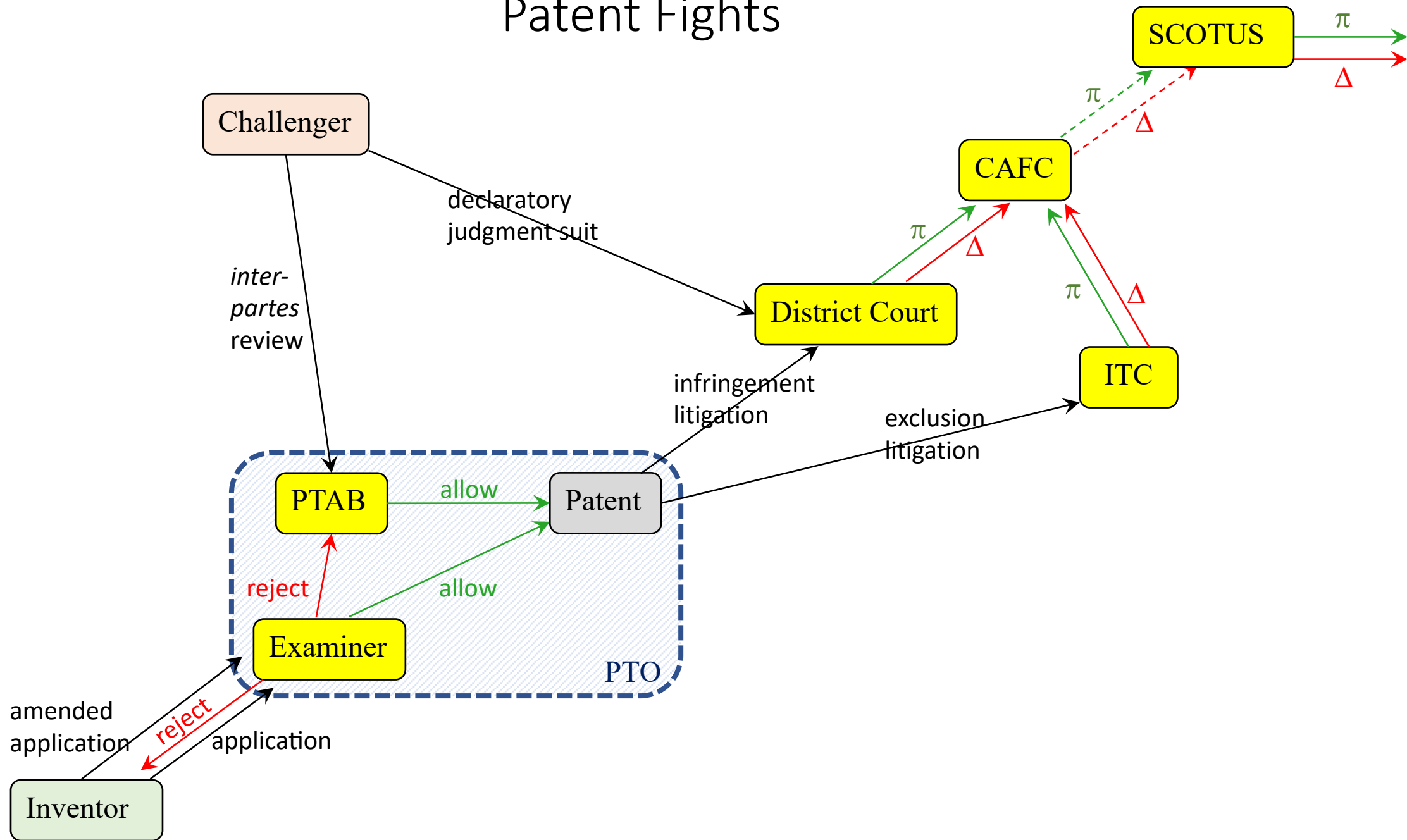
## Top 10 Districts Post-TC Heartland



Source: Fried, Frank, "A Look at District Court Filing Trends 120 Days after TC Heartland," October 11, 2017, <https://www.lexology.com/library/detail.aspx?g=bfe2b3ed-9e6c-4c0e-92c0-f63485fdc0e7>



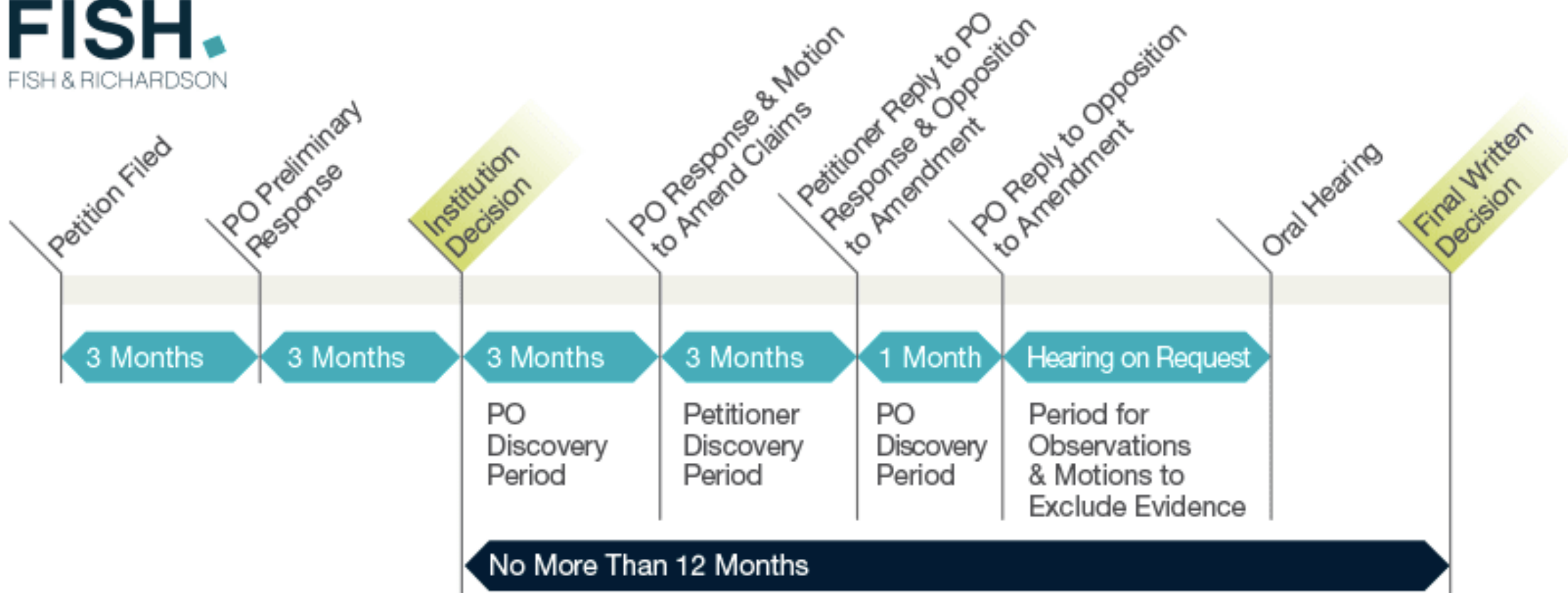
# Patent Fights





# Inter Partes Review Procedure

**FISH.**  
FISH & RICHARDSON



Source: <https://fishpostgrant.com/inter-partes-review/>

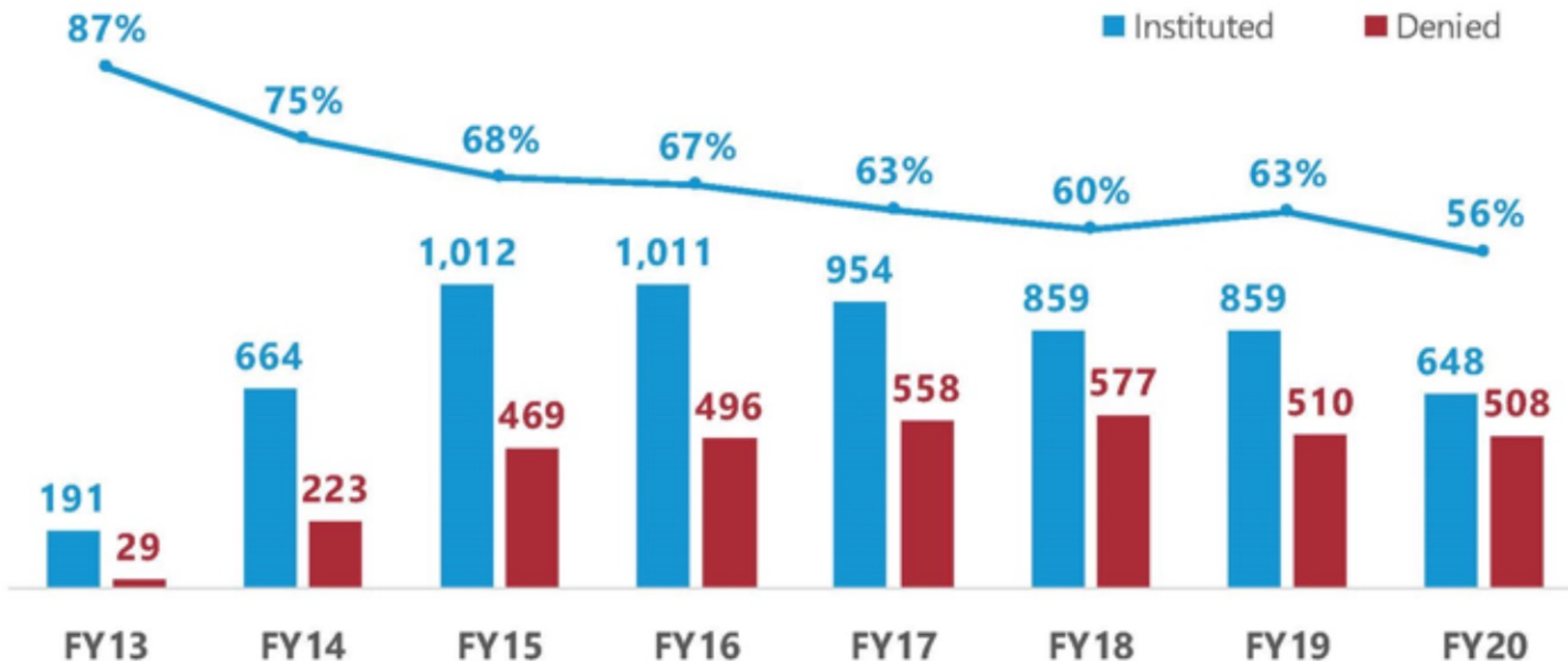
Detailed rules available at [https://www.uspto.gov/sites/default/files/aia\\_implementation/fr\\_specific\\_trial.pdf](https://www.uspto.gov/sites/default/files/aia_implementation/fr_specific_trial.pdf)





# Institution Rates

(FY13 to FY20: Oct. 1, 2012 to Sept. 30, 2020)



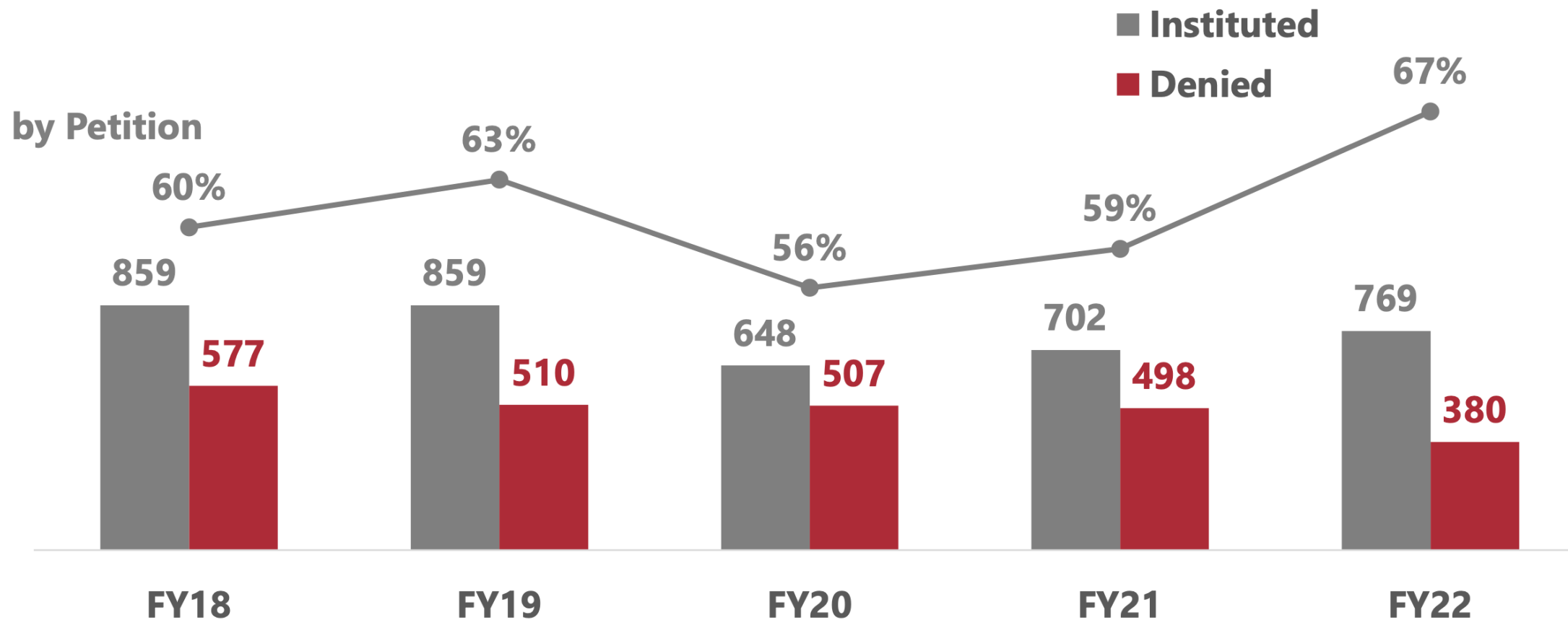
Institution rate for each fiscal year is calculated by dividing petitions instituted by decisions on institution (i.e., petitions instituted plus petitions denied). The outcomes of decisions on institution responsive to requests for rehearing are excluded.





# Institution rates by petition

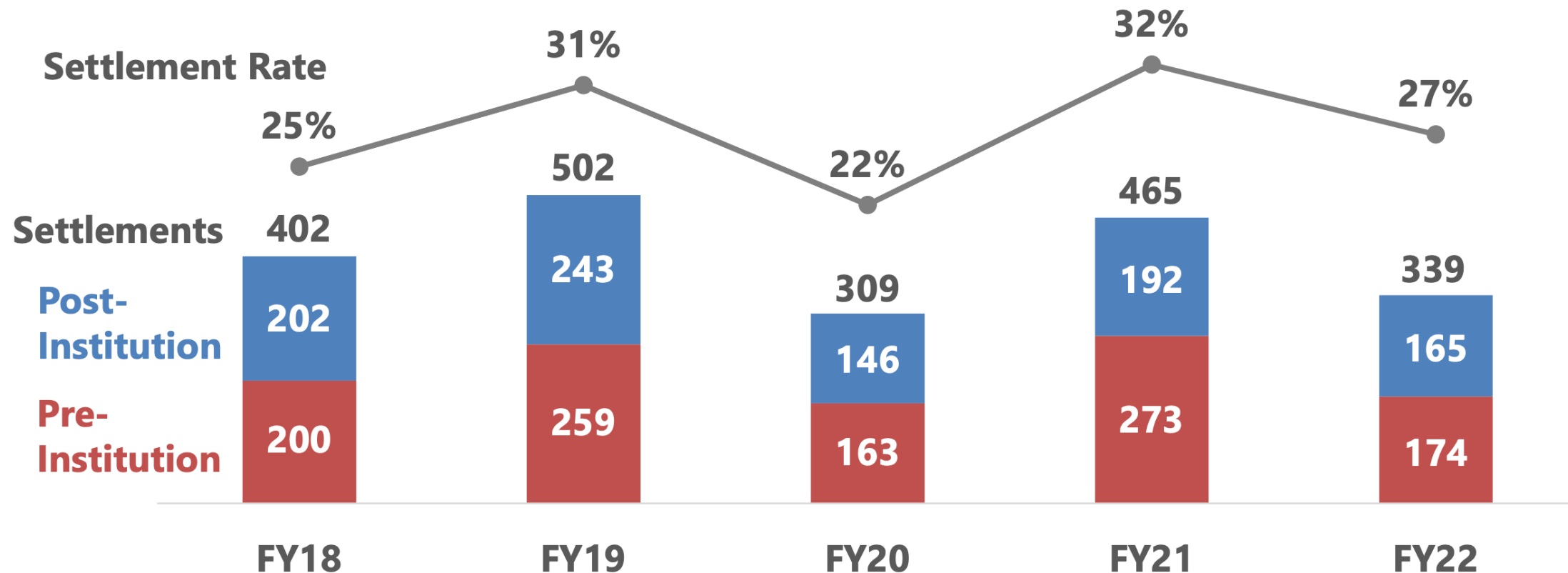
(FY18 to FY22: Oct. 1, 2017 to Sept. 30, 2022)





# Settlements

(FY18 to FY22: Oct. 1, 2017 to Sept. 30, 2022)



Settlement rate is calculated by dividing total settlements by concluded proceedings in each fiscal year (i.e., denied institution, settled, dismissed, requested adverse judgment, and final written decision), excluding joined cases.

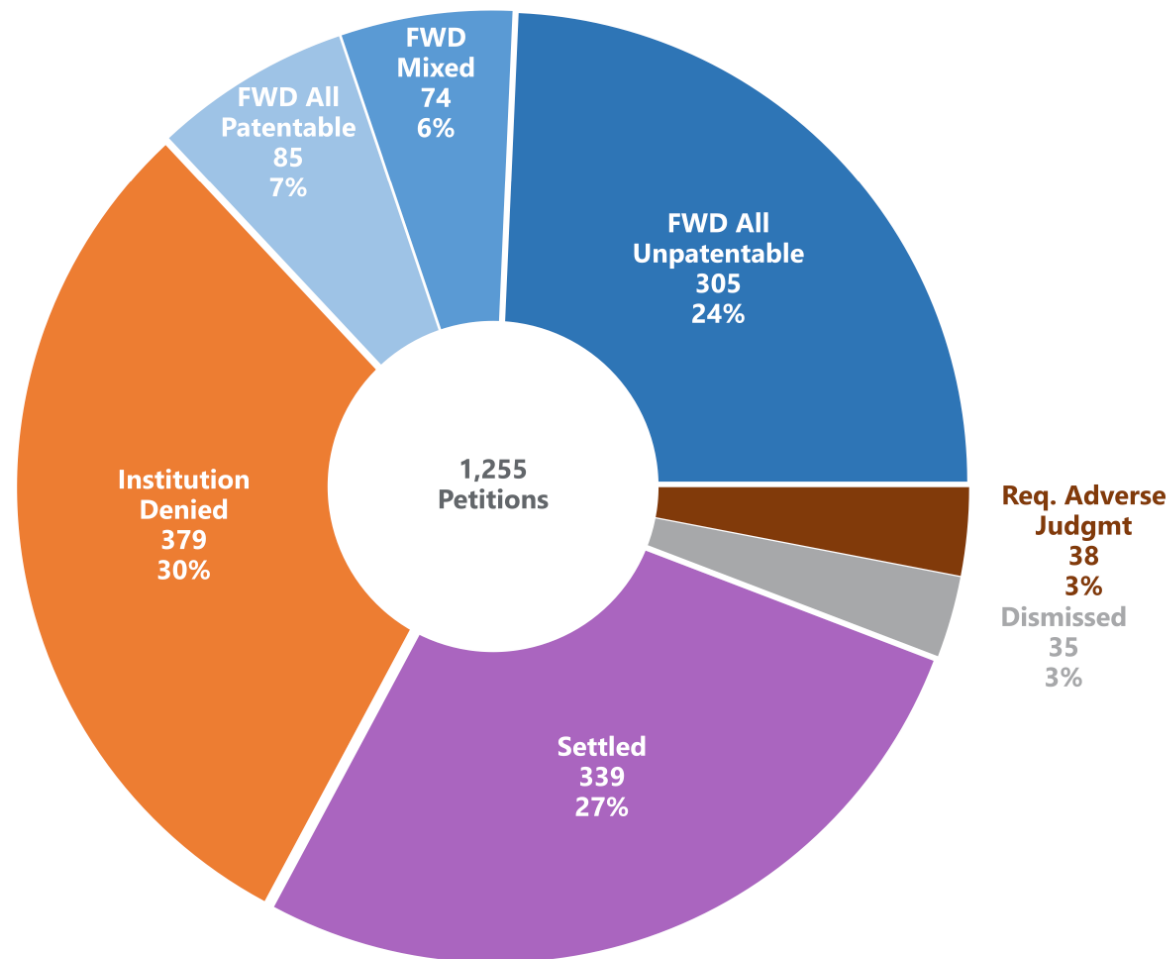






# Outcomes by petition

(FY22: Oct. 1, 2021 to Sept. 30, 2022)



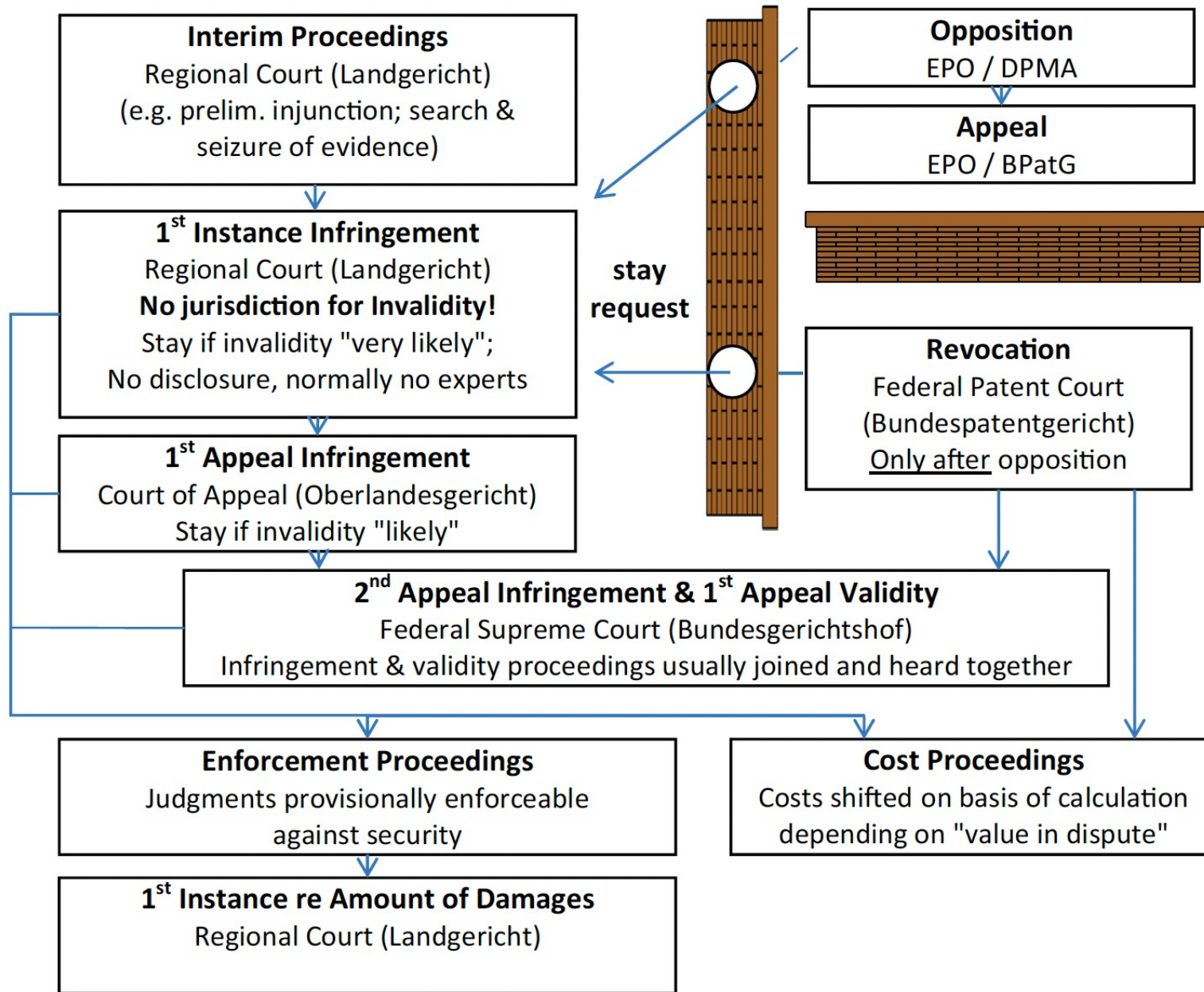
FWD patentability or unpatentability reported with respect to the claims at issue in the FWD. Joined cases are excluded.





## Proceedings available to Patentee

## Proceedings available to Alleged Infringer



**Fig. 1** Overview of the patent litigation system in Germany



# Nullity Proceedings in the German Federal Patent Court, 2018-2020

Total proceedings	Revoked	Partially revoked	Maintained
221	83	94	44
100.00%	37.56%	42.53%	19.91%

EP patents	Revoked	Partially revoked	Maintained
196	70	90	36
100%	35.71%	45.92%	18.37%

DE patents	Revoked	Partially revoked	Maintained
22	11	4	7
100%	50.00%	18.18%	31.82%

Source: Prof. Dr. Tilman Müller-Stoy, Dr. Anna Giedke, Julian Große-Ophoff, “Current revocation rates in German patent nullity proceedings” (2022), <https://www.bardehle.com/en/ip-news-knowledge/ip-news/news-detail/current-revocation-rates-in-german-patent-nullity-proceedings>



# Nullity Proceedings in the German Federal Patent Court, 2018-2020

Grounds for (partial) revocation	Frequency	Success rate
Novelty	80	36.20%
Inventive step	82	37.10%
Lack of enablement	1	0.45%
Inadmissible extension	23	10.41%
Other	13	5.88%

Source: Prof. Dr. Tilman Müller-Stoy, Dr. Anna Giedke, Julian Große-Ophoff, “Current revocation rates in German patent nullity proceedings” (2022), <https://www.bardehle.com/en/ip-news-knowledge/ip-news/news-detail/current-revocation-rates-in-german-patent-nullity-proceedings>



# Appeals of Nullity Rulings to the German Federal Court of Justice, 2018-2020

Total proceedings	Judgments amended	Judgments upheld
117	53	64
100.00%	45.30%	54.70%

Judgments upheld by the Court	Revoked	Partially revoked	Complaint dismissed
64	30	18	16
	46.88%	28.13%	25.00%

Source: Prof. Dr. Tilman Müller-Stoy, Dr. Anna Giedke, Julian Große-Ophoff, “Current revocation rates in German patent nullity proceedings” (2022), <https://www.bardehle.com/en/ip-news-knowledge/ip-news/news-detail/current-revocation-rates-in-german-patent-nullity-proceedings>



# Appeals of Nullity Rulings to the German Federal Court of Justice, 2018-2020

Total proceedings	Judgments amended	Judgments upheld
117	53	64
100.00%	45.30%	54.70%

Amending judgments	Revoked	Partially revoked	Partially restored	Restored	Referred back to the German Federal Patent Court
53	3	6	22	22	0
100%	5.66%	11.32%	41.51%	41.51%	0.00%

Source: Prof. Dr. Tilman Müller-Stoy, Dr. Anna Giedke, Julian Große-Ophoff, “Current revocation rates in German patent nullity proceedings” (2022), <https://www.bardehle.com/en/ip-news-knowledge/ip-news/news-detail/current-revocation-rates-in-german-patent-nullity-proceedings>