Patent Fundamentals

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Harvard Law School
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The terms on which these materials may be used or modified are available at http://ipxcourses.org.
Section A: Obtaining a Patent

Version 3.0
January 15, 2023
• Title
• Inventor(s)
• Related inventions
• Government research
• Background
• Summary
• Brief Description of Drawings
• Drawings
• Detailed Description
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• Abstract of disclosure
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<th>Title</th>
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Patent Prosecution

PTO

PTAB

Examiner

Inventor

District Court

CAFC

SCOTUS

amended application

reject

reject
Patent Prosecution

amended application

reject

Gatewood

PTO

Elpel

allow

Patent
United States Patent

Gatewood, Jr.

Patent Number: 5,673,509
Date of Patent: Oct. 7, 1997

[54] DISPOSABLE RODENT TRAP

[70] Inventor: Asker W. Gatewood, Jr., 3515 Wabash Ave., Baltimore, Md. 21215

[21] Appl. No.: 962,859

[22] Filed: Jan. 21, 1996

[51] Int. Cl. [52] U.S. Cl.

A61H 3/00
430/10

[56] References Cited

U.S. PATENT DOCUMENTS

7,002,258 4,909,259 383/06
7,109,129 4,929,320 383/16
2,903,898 6,490,100 383/10
2,905,748 6,549,614 383/16
3,334,458 4,929,320 383/06

FOREIGN PATENT DOCUMENTS

408,781 408,782

[73] ABSTRACT

This invention relates to an adhesive type rodent trap that is disposable and has an opaque binocular with a window, preventing unintended viewing 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.

6 Claims. 1 Drawing Sheet
1 DISPOUSEABLE 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 lesser similar type trap, it is usually still alive and violently thrashing while struggling to free itself, to the point where limbs become broken, deformed and possibly separated. Thus, the disposal of a rodent caught in a spring loaded trap is dirty, smelly, if not recently discovered, and potentially dangerous, while disposal of a rodent caught in the stickyn type trap can be quite inhuman as the person disposing of the dead rodent will now observe in aghast as to how he or she grasped the neck of the trap.

What is needed to solve the deficiencies inherent in the sticky type trap is a disposable, substantially oblique housing for the trap and a measuring 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, the present invention relates to a mouse trap that is disposable and has a housing with a translucent window, preventing unintended viewing of the trapped rodent but allowing quick intended viewing for checking if the trap is occupied.

The invention is a substantial improvement to existing stickyn type mouse and rodent traps. Instead of having an exposed tray of trapping adhesive, as commonly used today, the invention encloses the area of adhesive within an oblique housing, thereby preventing first, fresh children, or even the use of a trapping 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 transparent, allowing the trap to be periodically checked as a trapped rodent can be disposed of quickly.

To further assist in disposing of the trap, the housing is open on a single side, with its open side containing a dragging type handle. Thus, the handle can merely pull the mouse from the trap and the side of the housing will close, entrapping the trapped mouse within the housing of the trap. It is therefore an object of this invention to provide a trap which is disposable and inexpensive.

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

The new trap comprises an 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 a still further object of this invention to provide a trap which has only one opening such that a dragging type handle can close the trap with a single pull.

2 It is yet another object of this invention to protect unintended animals and people from becoming accidentally adhesed 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 side view of the rodent trap shown in FIG. 1.

DETAILED DESCRIPTION OF THE DRAWINGS
Referring to FIGS. 1 and 2, the general trap 19 is illustrated in isometric perspective and side view, respectively. FIG. 2 is a perspective view of the housing 20 with its two opposing side halves 16A and 16B, with a trap face 18, and an enclosing end face 17. These faces in turn create an entrance opening 23 opposite the enclosing end face 17. The housing 12 are assembled either by means of a measuring means secured with adhesive, as a paper bag is constructed, or are screwed at the seams. The material used, however, should be rigid enough to stand open to size when assembled and resting on its bottom face 14.

While the exterior of the bottom face 14 resists from the front, the interior contains the trapping adhesive 24. The trapping adhesive 24 can be any type that is sufficiently tacky enough to entice and hold the present rodent intended to be trapped. The adhesive 24 is preferably placed either in the center or close to the rear of the bottom face 14, assuming that a trapped rodent is not visually concealed externally by means of opening 23. The area of adhesive 24 can be an existing stick still excluding the housing or preferably, is incorporated directly within the bottom face 14 of the trap 18.

The top face 18 includes a translucent viewing window 22 preferably located in an opening 28 directly above the adhesive trapping area 24 and being similar in shape and area. The window is attached to the opening 28 of the top face 18 by a strip of adhesive or a line of stitching 24. This window 22 allows for viewing the exterior of the adhesive area 24 to see if it is a rodent. Thus, viewing of a trapped rodent is quick with the limited purpose and duration of checking the trap 18 in occupancy. If the trap 18 is occupied, it can then be disposed of without further viewing of the trapped rodent.

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

Disposal of the trap 18 is simple due to the inclusion of a dome shaped tray closing and carrying handle 26. This handle 26 is located near the entrance opening and attached to the bottom face 14 and passing through the top face 18 via a removable aperture 30. The handle 26 is constructed from an inexpensive elongated strand, preferably rigid, and is attached to the interior of the housing 20, either tape or rope stitching. The string handle 26 extends upward, through the transparent fall 30, and terminates into a 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 23, thereby closing the trap housing 12, entrapping 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 invention.

1. A disposable rodent trapping device, comprising:
   a substantially lightweight and flexible housing having a bottom face, a trap face, an entrance opening in said housing for said rodent, and an aperture in said trap face located opposite said entrance opening; a measuring means associated 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 trap face, and a trapping area, all adhesively attached to the periphery of said viewing opening in said trap face, having a transparent viewing window in said trap face.

2. A disposable rodent trapping device as recited in claim 1, wherein:
   a. said housing is opaque except for said transparent window in said top face.
   b. said housing is opaque except for said transparent window in said top face.
   c. said housing is opaque except for said transparent window in said top face.
   d. said housing is opaque except for said transparent window in said top face.

3. A disposable rodent trapping device as recited in claim 1, wherein:
   a. said trap face is extended.
   b. a disposable rodent trapping device as recited in claim 1, wherein:
   c. said trap face is extended.
   d. a disposable rodent trapping device as recited in claim 1, wherein:
   e. said trap face is extended.

4. A disposable rodent trapping device as recited in claim 1, wherein:
   a. said trap face is extended.
   b. a disposable rodent trapping device as recited in claim 1, wherein:
   c. said trap face is extended.
   d. a disposable rodent trapping device as recited in claim 1, wherein:
   e. said trap face is extended.

5. A disposable rodent trapping device as recited in claim 1, wherein:
   a. said trap face is extended.
   b. a disposable rodent trapping device as recited in claim 1, wherein:
   c. said trap face is extended.
   d. a disposable rodent trapping device as recited in claim 1, wherein:
   e. said trap face is extended.
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
Anatomy of a Patent

- Inventor(s)
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- Summary
- Brief Description of Drawings
- Detailed Description
  - Description of the Preferred Embodiment
  - 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)
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• Summary
• Brief Description of Drawings
• Detailed Description
  • Description of the Preferred Embodiment
  • Examples (working and/or prophetic)
• Claims
Anatomy of a Patent

- Inventor(s)
- Title: Disposable rodent trap
- Abstract
- Background
- Summary
- Brief Description of Drawings
- Detailed Description
  - Description of the Preferred Embodiment
  - Examples (working and/or prophetic)
- Claims
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.
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....
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

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.
The present invention relates to a mouse trap. More particularly, this invention relates to a mouse trap that is disposable and has an 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 adhesed to the trap.
Anatomy of a Patent

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

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.
Anatomy of a Patent

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....
Anatomy of a Patent

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- Summary
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- Detailed Description
  - Description of the Preferred Embodiment
  - Examples (working and/or prophetic)
- Claims

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.
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**

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....
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

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
  - Austria
  - Belgium
  - Bulgaria
  - Croatia
  - Cyprus
  - Czech Republic
  - Denmark
  - Estonia
  - Finland
  - France
  - Germany
  - Greece
  - Hungary
  - Iceland
  - Ireland
  - Italy
  - Latvia
  - Liechtenstein
  - Lithuania
  - Luxembourg
  - Malta
  - Monaco
  - Montenegro
  - Netherlands
  - North Macedonia
  - Norway
  - Poland
  - Portugal
  - Romania
  - San Marino
  - Serbia
  - Slovakia
  - Slovenia
  - Spain
  - Sweden
  - Switzerland
  - Turkey
  - 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
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.
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.
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.
| (51) International Patent Classification ⑥: | (11) International Publication Number: |
| A01M 1/10 | WO 99/03339 |
| (21) International Application Number: | (43) International Publication Date: |
| PCT/US97/12233 | 28 January 1999 (28.01.99) |
| (22) International Filing Date: | |
| 14 July 1997 (14.07.97) | |
| (71)(72) Applicant and Inventor: | (81) Designated States: |
| (74) Agent: CRAIG, Royal, W.; Law Offices of Royal W. Craig, Suite 1123, 210 North Charles Street, Baltimore, MD 21201 (US). | Published |
| | With international search report. |
INTERNATIONAL SEARCH REPORT

International application No.
PCT/USA597/2333

A. CLASSIFICATION OF SUBJECT MATTER
IPC6: -AGM 2/10
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 above

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

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
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<tbody>
<tr>
<td>A</td>
<td>US 5,577,341 A (MOLLOI) 20 NOVEMBER 1996</td>
<td></td>
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<td>A</td>
<td>US 5,175,969 A (HOOVER, SR. ET AL) 05 JANUARY 1993</td>
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<td>A</td>
<td>US 4,425,731 A (ORLANDO) 17 JANUARY 1984</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>US 1,112,064 A (GORDON) 29 SEPTEMBER 1914</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>US 1,029,001 A (FINGERHUT) 11 JUNE 1912</td>
<td></td>
</tr>
</tbody>
</table>

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

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
Box ICE, P.O. 30331
P.O. Box No. (703) 303-3230

Authorized officer
KURT ROWAN
Telephone No. (703) 308-2351

Form PCT/ISA/210 (second sheet) (July 1992)
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 and added to the application 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-AT-DE-ES-FR-GB-IE-IT-LU-NL-PT
Ostwood, Askew W., Jr.
3015 Webah Avenue
Baltimore, MD 21215-7415/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.

Examing Division
KOCK S Z
MAREANO MONTEROSSO M
CARDAN C
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.

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

Price: $496.32

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

- Small: $549.99 Prime
- Medium: $549.99 Prime
- X-Large: $496.32 Prime

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
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
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

Monopoly Profits

Deadweight Loss (foregone consumer surplus)

Demand

Profit-maximizing price

Marginal Cost

Profit-maximizing output

$
Section C: Enforcing and Challenging Patents

Version 3.0
January 15, 2023
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

Patent Fights

Challenger
inter partes review

District Court
declaratory judgment suit
infringement litigation

PTAB
allow
reject
amended application

Examiner
allow
reject
application

Patent

PTO

ITC
exclusion litigation

SCOTUS

Inventor
application

Patent Fights
Inter Partes Review Procedure

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

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: 60% Instituted, 577 Denied
- FY19: 63% Instituted, 510 Denied
- FY20: 56% Instituted, 507 Denied
- FY21: 59% Instituted, 498 Denied
- FY22: 67% Instituted, 380 Denied
Settlements

Settlement Rate
25% 31% 22% 32% 27%

Settlements
FY18 FY19 FY20 FY21 FY22
Post-Institution 202 243 309 192 339
Pre-Institution 200 259 146 273 165

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

- Institution Denied: 379 (30%)
- FWD All Patentable: 85 (7%)
- FWD Mixed: 74 (6%)
- FWD All Unpatentable: 305 (24%)
- Req. Adverse Judgmt: 38 (3%)
- Dismissed: 35 (3%)
- Settled: 339 (27%)

1,255 Petitions

FWD patentability or unpatentability reported with respect to the claims at issue in the FWD. Joined cases are excluded.
Fig. 1 Overview of the patent litigation system in Germany

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

<table>
<thead>
<tr>
<th>Total proceedings</th>
<th>Revoked</th>
<th>Partially revoked</th>
<th>Maintained</th>
</tr>
</thead>
<tbody>
<tr>
<td>221</td>
<td>83</td>
<td>94</td>
<td>44</td>
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<tr>
<td>100.00%</td>
<td>37.56%</td>
<td>42.53%</td>
<td>19.91%</td>
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<table>
<thead>
<tr>
<th>EP patents</th>
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<tr>
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<td>35.71%</td>
<td>45.92%</td>
<td>18.37%</td>
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<td>4</td>
<td>7</td>
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<tr>
<td>100%</td>
<td>50.00%</td>
<td>18.18%</td>
<td>31.82%</td>
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Nullity Proceedings in the German Federal Patent Court, 2018-2020

<table>
<thead>
<tr>
<th>Grounds for (partial) revocation</th>
<th>Frequency</th>
<th>Success rate</th>
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<tr>
<td>Novelty</td>
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<tr>
<td>Inventive step</td>
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<tr>
<td>Lack of enablement</td>
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<td>0.45%</td>
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<tr>
<td>Inadmissible extension</td>
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<td>Other</td>
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### Appeals of Nullity Rulings to the German Federal Court of Justice, 2018-2020

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<tr>
<th>Total proceedings</th>
<th>Judgments amended</th>
<th>Judgments upheld</th>
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<tbody>
<tr>
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<td>53</td>
<td>64</td>
</tr>
<tr>
<td>100.00%</td>
<td>45.30%</td>
<td>54.70%</td>
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</table>

<table>
<thead>
<tr>
<th>Judgments upheld by the Court</th>
<th>Revoked</th>
<th>Partially revoked</th>
<th>Complaint dismissed</th>
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<tbody>
<tr>
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<td>16</td>
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<tr>
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<td>28.13%</td>
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## Appeals of Nullity Rulings to the German Federal Court of Justice, 2018-2020

<table>
<thead>
<tr>
<th>Total proceedings</th>
<th>Judgments amended</th>
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</tr>
</thead>
<tbody>
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<td>117</td>
<td>53</td>
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<tr>
<td>100.00%</td>
<td>45.30%</td>
<td>54.70%</td>
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</table>

<table>
<thead>
<tr>
<th>Amending judgments</th>
<th>Revoked</th>
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<th>Partially restored</th>
<th>Restored</th>
<th>Referred back to the German Federal Patent Court</th>
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<td>6</td>
<td>22</td>
<td>22</td>
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<td>5.66%</td>
<td>11.32%</td>
<td>41.51%</td>
<td>41.51%</td>
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