



# Jackson State University

## Division of Research and Federal Relations

### Intellectual Property Primer

### February 4, 2015

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Special Assistant Attorney General  
Office of the Attorney General

# Intellectual Property

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- IP describes legal rights or entitlements to certain types of information, ideas, products, creative expressions, and intangibles in their expressed form.
- IP involves legal rights that authors, inventors, and other IP holders or owners may exercise, but not the intellectual work itself, so that they may exclude or include others regarding use and commercialization of the IP.
- IP concerns products of individual creativeness and can be protected by law similar to other forms of property.
- IP generally includes patents, trademarks, copyrights, and trade secrets.

# IP Exclusive Rights

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- Grant the holder the ability to exclude others or 3<sup>rd</sup> parties from infringing on the holder's monopoly.
  - Ex: Registered trademark owner can use a mark related to products or services and can exclude others from trademark use related to those products or services.
- Can be transferred, sold, licensed, or mortgaged to others or 3<sup>rd</sup> parties.
  - Ex: Copyright rights prevent copying the material form of the expression of an idea, but NOT from expressing the same idea in a different form and NOT from using the same form of expression without knowledge of the original held by someone else.

# IP Exclusive Rights

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- Ex: Patent rights can be used to exclude others from making, using, offering for sale, or selling the same property for a predetermined time even if they had not seen or heard about the property.

# Intellectual Property Valuation

- IP has value to its holder or owner.
- IP value can be assessed based on potential and actual:
  1. Sales
  2. Licensing
  3. Marketing
- Negative value can be based on:
  1. Becoming obsolete
  2. Competition
  3. Unauthorized copying
  4. Infringement or invalidation

# Intellectual Property Valuation

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- The value of IP is determined by the future income associated with its ownership.
- The value of IP may be dependent on its cost:
  - Ex: Creation of a musical composition or valuable software may have little cost, but may generate high income.
  - Ex: Creation of a complex machine or motion picture may have high cost, but may generate little income.
- As a result, profit margins from IP may be much higher than profit margins from manufactured goods.

# Intellectual Property Valuation

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- Future income values from IP are determined by considering:
  1. The amount sold.
  2. The net income per unit after deducting sales costs.

# Intellectual Property Protection

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- IP infringement generally carries civil penalties in the form of monetary damages.
- IP theft generally carries possible state and federal civil and/or criminal liability for violations including:
  - Trade secret misappropriation
  - Trademark infringement
  - Copyright infringement
  - Patent infringement
- Ex: In July 2006, 3 individuals were criminally charged with theft and sale of confidential information and trade secrets concerning drink recipes from the Coca-Cola Co.



# Forms of Intellectual Property

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- Patents
- Trademarks (Service Marks)
- Certification Marks; Collective Marks
- Copyrights
- Trade Secrets (Confidential Information)
- Trade Dress
- Domain Names
- Semiconductor Mask Works

# 3 Types of Patents

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- Design
- Plant
- Utility
  - Provisional

# Design Patents

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- May be granted for the invention or discovery of any new, original, and ornamental non-functional appearance or design of an article of manufacture.
- Protects looks or appearance, but not structural, utilitarian, or functional features.
- May relate to configuration or shape.
- May relate to surface ornamentation.

# Design Patents

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- Conceptually distinguished from utility patents that protect how an invention works or is used.
- Only 1 claim is allowed.
- Term of 14 years from grant (issue date).
- No maintenance fees required.



US00D699008S

**(12) United States Design Patent**  
**Wang****(10) Patent No.: US D699,008 S**  
**(45) Date of Patent: \*\* Feb. 4, 2014****(54) REPTILE BREEDING TANK****(71) Applicant: Eiko Electric Products Corp., Taipei (TW)****(72) Inventor: Yu-Chin Wang, Taipei (TW)****(73) Assignee: Eiko Electric Products Corp., Taipei (TW)****(\*\*) Term: 14 Years****(21) Appl. No.: 29/447,594****(22) Filed: Mar. 5, 2013****(51) LOC (10) Cl. .... 30-02****(52) U.S. Cl. .... D30/108**  
USPC**(58) Field of Classification Search**USPC ..... D30/108-109, 112-117, 160-161, 101;  
119/452-453, 474, 481-482, 489, 491,  
119/494, 496-498, 501, 513-514, 246, 266  
See application file for complete search history.**(56) References Cited****U.S. PATENT DOCUMENTS**

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D612,999 S	*	3/2010	Migita	.....	D30/108
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D683,080 S	*	5/2013	Snow	.....	D30/108

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Primary Examiner — Cathy A MacCormac

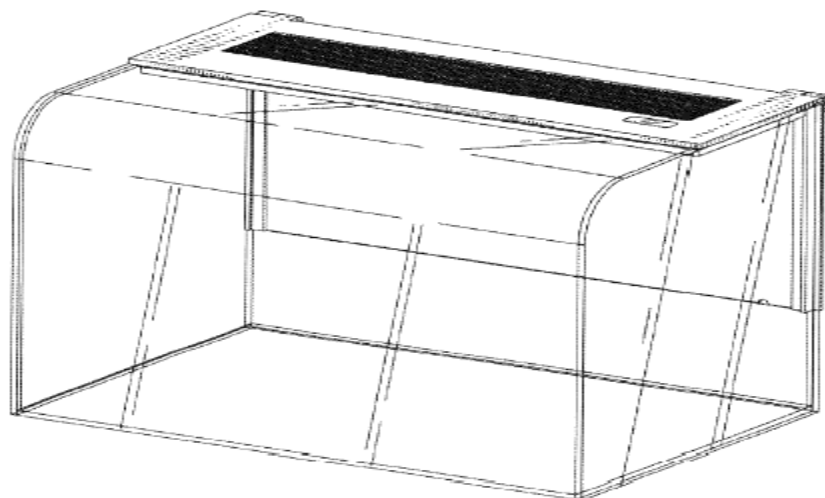
(74) Attorney, Agent, or Firm — Guice Patents PLLC

**(57) CLAIM**

The ornamental design for a reptile breeding tank, as shown and described.

**DESCRIPTION**

FIG. 1 is a perspective view of a reptile breeding tank showing my new design;  
 FIG. 2 is a front elevation view thereof;  
 FIG. 3 is a rear elevation view thereof;  
 FIG. 4 is a left side elevation view thereof;  
 FIG. 5 is a right side elevation view thereof;  
 FIG. 6 is a top view thereof; and,  
 FIG. 7 is a bottom view thereof.

**1 Claim, 7 Drawing Sheets**



US00D698983S

**(12) United States Design Patent**  
**Rampolla et al.****(10) Patent No.: US D698,983 S****(45) Date of Patent: \*\* Feb. 4, 2014****(54) CEILING LIGHT****(71) Applicant: Emme Pi Light-Masiero S.R.L., Casale sul Sile (IT)****(72) Inventors: Gianpaolo Rampolla, Palermo (IT);  
Andrea Liguori, Palermo (IT)****(73) Assignee: Emme Pi Light—Masiero S.R.L.,  
Casale sul Sile (IT)****(\*\*) Term: 14 Years****(21) Appl. No.: 29/456,855****(22) Filed: Jun. 4, 2013****(51) LOC (10) CL. 26-03****(52) U.S. CL.**

USPC ..... D26/90; D26/88

**(58) Field of Classification Search**USPC ..... D26/72, 80–84, 88–91, 118; 362/147,  
362/404–408

See application file for complete search history.

**(56) References Cited****U.S. PATENT DOCUMENTS**

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D45,539 S	• 3/1914	Meyers	.....	D26/90
D441,895 S	• 5/2001	Orozco	.....	D26/85

D465,872 S	• 11/2002	Cacaci	.....	D26/90
D566,320 S	• 4/2008	Kim	.....	D26/88
D593,704 S	• 6/2009	Lovegrove	.....	D26/90
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D687,589 S	• 8/2013	Wick	.....	D26/90
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**OTHER PUBLICATIONS**Aircraft AC181 Eternity 33 Light Circular LED Foyer Pendant.  
Found at homeclick.com visited Oct. 22, 2013.\*Anapolis 10 light pendant #16484-016 shown on p. 210 of the  
Eurofase Illuminations Catalog #MKT-CAT-EF09. © 2009. (2 pages;  
includes rear cover).\*

\* cited by examiner

**Primary Examiner — Clare E Heflin****(74) Attorney, Agent, or Firm — Themis Law****(57) CLAIM**

The ornamental design for a ceiling light, as shown.

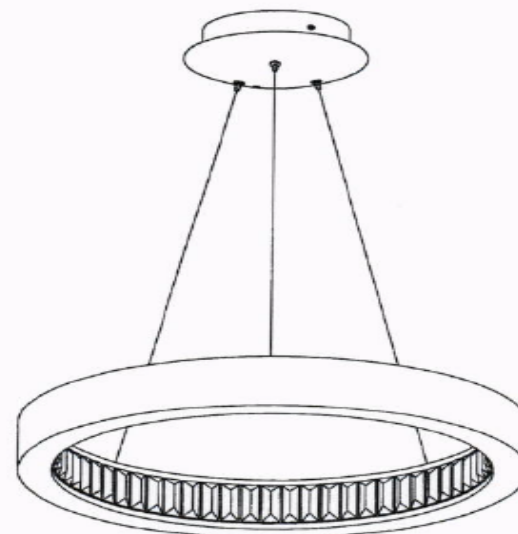
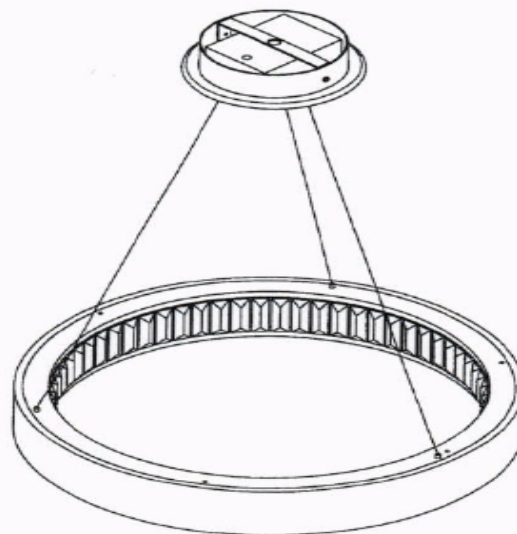
**DESCRIPTION**FIG. 1 is a first perspective view of a ceiling light showing our  
new design;

FIG. 2 is a second perspective view thereof;

FIG. 3 is a front elevational view thereof;

FIG. 4 is a top plan view thereof; and,

FIG. 5 is a bottom plan view thereof.

**1 Claim, 5 Drawing Sheets**



US00D698895S

**(12) United States Design Patent**  
**Bollero****(10) Patent No.: US D698,895 S**  
**(45) Date of Patent: \*\* Feb. 4, 2014****(54) SHOWER HEAD****(71) Applicant: Jens Bollero, Eccles (GB)****(72) Inventor: Jens Bollero, Eccles (GB)****(\*\*) Term: 14 Years****(21) Appl. No.: 29/438,188****(22) Filed: Nov. 27, 2012****(51) LOC (10) Cl. .... 23-01****(52) U.S. Cl. .... D23/213; D21/710**  
USPC**(58) Field of Classification Search**  
USPC ..... D23/213, 223, 229, 230, 215; D2/882,  
D2/886; D29/102-106; 239/211; D21/710,  
D21/780, 781, 788, 707, 708, 709, 712, 713  
See application file for complete search history.**(56) References Cited****U.S. PATENT DOCUMENTS**

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D357,524 S	*	4/1995	Langmar et al.	.....	D23/215
D358,232 S	*	5/1995	Hoshizaki et al.	.....	D29/106
D374,897 S	*	10/1996	Whisman	.....	D21/710
D382,329 S	*	8/1997	Jun	.....	D23/215
D424,165 S	*	5/2000	Guo et al.	.....	
D575,434 S	*	8/2008	Nunes	.....	
D579,993 S	*	11/2008	Fairchild et al.	.....	D21/710

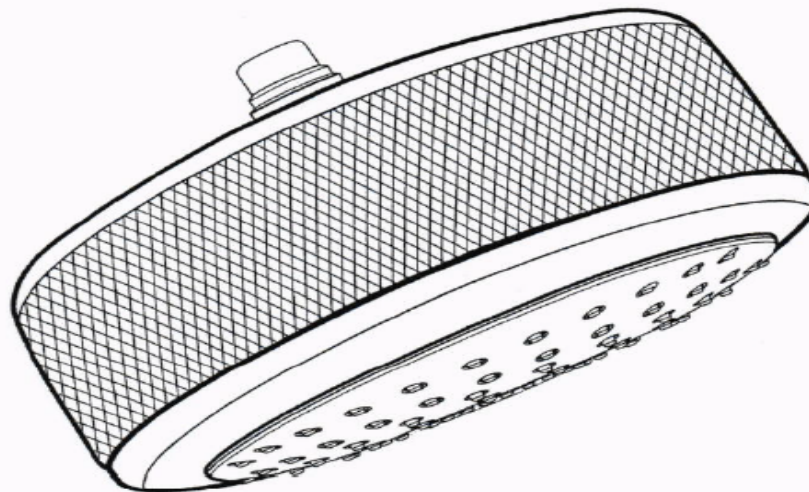
D616,066 S		5/2010	Cummings et al.	
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D633,174 S	*	2/2011	Lee	
D639,383 S	*	6/2011	Holbrook	..... D23/213
D654,251 S	*	2/2012	Alkas-Shamoun	..... D2/882
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D670,892 S	*	11/2012	Epstein	..... D2/882
D671,687 S	*	11/2012	Winningham et al.	..... D29/106
D671,716 S	*	12/2012	Lam et al.	..... D2/882
2008/0196159 A1		8/2008	Lee	
2011/0244009 A1		10/2011	Gelin	

\* cited by examiner

Primary Examiner — Robin V Webster

(74) Attorney, Agent, or Firm — Amy Allen Hinson; Nexsen  
Pruet, LLC**(57) CLAIM**

The ornamental design for a shower head, as shown and described.

**DESCRIPTION**FIG. 1 is a front view of a shower head embodying the design of the present invention;  
FIG. 2 is a side perspective view of the shower head illustrated in FIG. 1; and,  
FIG. 3 is a bottom view of the shower head illustrated in FIG. 1.**1 Claim, 3 Drawing Sheets**



US00D698880S

**(12) United States Design Patent**  
**Donaghue****(10) Patent No.: US D698,880 S**  
**(45) Date of Patent: \*\* Feb. 4, 2014****(54) GOLF CLUB HEAD****(71) Applicant: Point-n-Putt Pty. Ltd., Deakin (AU)****(72) Inventor: Paul Joseph Donaghue, Deakin (AU)****(73) Assignee: Point-n-Putt Pty. Ltd., Deakin, ACT (AU)****(\*\*) Term: 14 Years****(21) Appl. No.: 29/443,278****(22) Filed: Jan. 15, 2013****(30) Foreign Application Priority Data**Jul. 16, 2012 (AU) ..... 13362/2012  
Jul. 16, 2012 (AU) ..... 13363/2012**(51) LOC (10) CL. .... 21-02****(52) U.S. CL. .... D21/747**  
USPC .....**(58) Field of Classification Search**  
USPC ..... D21/747-751, 759; 473/324-331, 350  
See application file for complete search history.**(56) References Cited****U.S. PATENT DOCUMENTS**D44,457 S • 8/1913 Taylor, Jr. .... D21/751  
1,089,881 A • 3/1914 Taylor, Jr. .... 473/328  
3,830,503 A • 8/1974 Consoli ..... 473/328  
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7,618,330 B2 • 11/2009 Krewalk et al. .... 473/328  
D638,894 S • 5/2011 Potter ..... D21/759

\* cited by examiner

*Primary Examiner* — Mitchell Siegel**(74) Attorney, Agent, or Firm** — Fish & Richardson P.C.**(57) CLAIM**

The ornamental design for a golf club head, substantially as shown and described.

**DESCRIPTION**

FIG. 1 is a front face view of the new ornamental design.

FIG. 2 is a top view of the design.

FIG. 3 is an inverted rear view of the design.

FIG. 4 is a bottom view of the design.

FIG. 5 is a left side view of the design.

FIG. 6 is a right side view of the design.

FIG. 7 is a first perspective view of the design.

FIG. 8 is a second perspective view of the design.

FIG. 9 is a front face view of an alternate embodiment of the new ornamental design.

FIG. 10 is a top view thereof.

FIG. 11 is an inverted rear view thereof.

FIG. 12 is a bottom view thereof.

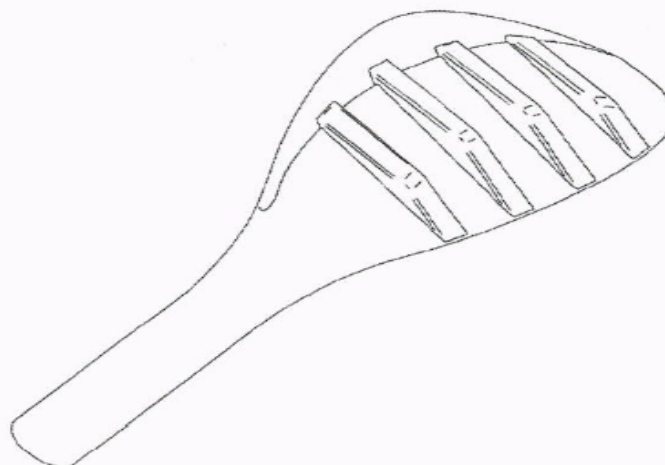
FIG. 13 is a left side view thereof.

FIG. 14 is a right side view thereof.

FIG. 15 is a first perspective view thereof; and,

FIG. 16 is a second perspective view thereof.

Those features shown in broken lines represent environmental structure and form no part of the claimed design.

**1 Claim, 16 Drawing Sheets**





US00D698873S

**(12) United States Design Patent  
Overlie****(10) Patent No.: US D698,873 S****(45) Date of Patent: \*\* Feb. 4, 2014****(54) RUBBER BAND GUN****(71) Applicant: Lowman Log Works Inc., Lowman, ID (US)****(72) Inventor: Wade D. Overlie, Lowman, ID (US)****(73) Assignee: Lowman Log Works Inc., Lowman, ID (US)****(\*\*) Term: 14 Years****(21) Appl. No.: 29/436,557****(22) Filed: Nov. 7, 2012****(51) LOC (10) CL ..... 21-01****(52) U.S. CL ..... D21/574****(58) Field of Classification Search**  
USPC ..... D21/567, 570, 573, 574; D22/100,  
D22/104-106; 124/18, 19, 21, 22  
See application file for complete search history.**(56) References Cited****U.S. PATENT DOCUMENTS**1,759,084 A • 5/1930 Baum et al. .... 124/19  
2,573,142 A • 10/1951 Herring ..... 124/19  
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3,119,385 A • 1/1964 Ashley ..... 124/193,297,012 A • 1/1967 Kirkland ..... 124/18  
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4,308,850 A • 1/1982 Hunter ..... 124/19  
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4,800,864 A • 1/1989 Small ..... 124/19  
D305,252 S • 12/1989 Nielson et al. .... D21/574  
5,170,770 A • 12/1992 Vosloh ..... 124/19

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*Primary Examiner* — Cynthia M Chin*(74) Attorney, Agent, or Firm* — Jeffrey Parry Intellectual  
Property Law Group PLLC; Jeffrey C. Parry**(57) CLAIM**I claim the ornamental design for a rubber band gun, as shown  
and described.**DESCRIPTION**FIG. 1 is a side view of a rubber band gun embodiment of the  
disclosure;

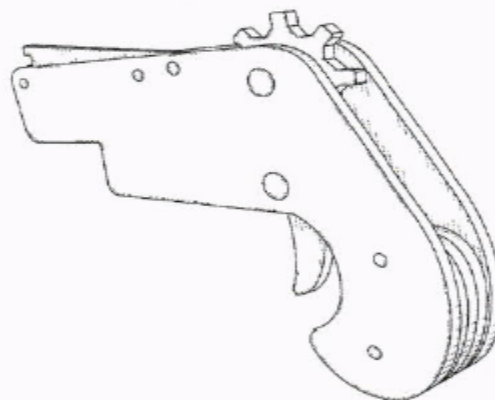
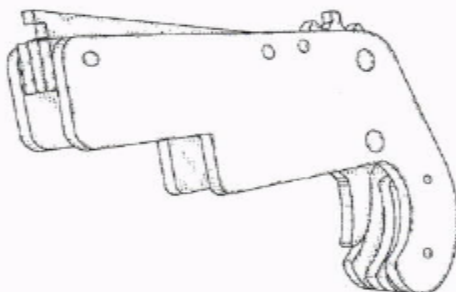
FIG. 2 is a front perspective view of a rubber band gun;

FIG. 3 is a rear perspective view of a rubber band gun;

FIG. 4 is a top perspective view of a rubber band gun;

FIG. 5 is a top-rear perspective view of a rubber band gun;  
and,

FIG. 6 is a top view of a rubber band gun.

The broken lines shown are included for the purpose of illus-  
trating the unclaimed portions of the article and form no part  
of the claimed design.**1 Claim, 3 Drawing Sheets**



US00D698870S

(12) **United States Design Patent**  
**Lee**(10) **Patent No.:** **US D698,870 S**  
(45) **Date of Patent:** **\*\* Feb. 4, 2014**(54) **SOLAR-POWERED TOY CAR**(71) Applicant: **Wen-Hsien Lee, New Taipei (TW)**(72) Inventor: **Wen-Hsien Lee, New Taipei (TW)**(\*\*) Term: **14 Years**(21) Appl. No.: **29/447,620**(22) Filed: **Mar. 5, 2013**(51) **LOC (10) CL** ..... **21-01**(52) **U.S. CL**  
USPC ..... **D21/551**(58) **Field of Classification Search**  
USPC ..... D21/533, 548, 549, 550, 551, 552, 561,  
D21/562, 433; 446/251, 268, 272, 274, 275,  
446/277, 465, 468, 470, 471, 431, 454-456  
See application file for complete search history.(56) **References Cited****U.S. PATENT DOCUMENTS**

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D260,665 S	*	9/1981	Yamashina	.....	D21/551
D262,564 S	*	1/1982	Yamashina	.....	D21/549
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D329,475 S	*	9/1992	Revell	.....	D21/551

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D402,712 S	*	12/1998	Lun	.....	D21/533
D410,260 S	*	5/1999	Lun	.....	D21/548
D433,467 S	*	11/2000	Tsai	.....	D21/552
D455,799 S	*	4/2002	Yamazaki	.....	D21/551
D462,097 S	*	8/2002	Jacquard	.....	D21/533

\* cited by examiner

Primary Examiner — Cynthia M Chin

(74) Attorney, Agent, or Firm — patenttm.us

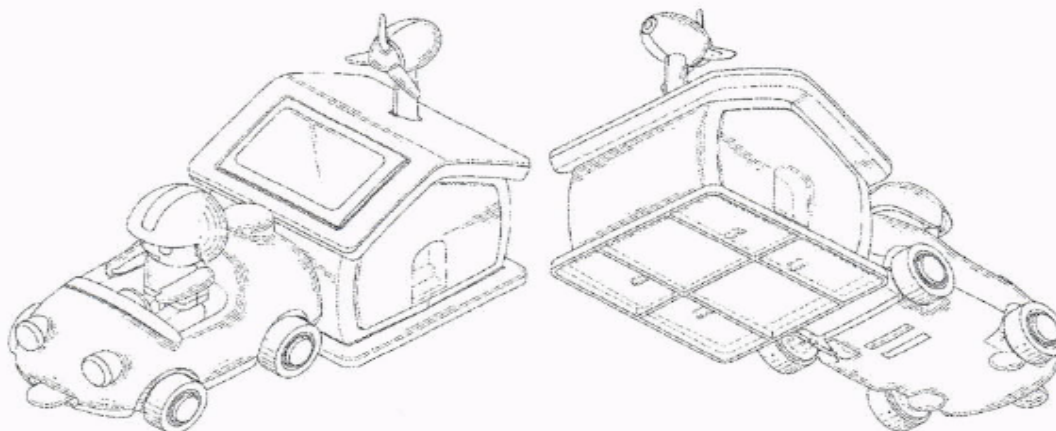
(57) **CLAIM**

The ornamental design for a solar-powered toy car, as shown and described.

**DESCRIPTION**

FIG. 1 is a perspective view of a solar-powered toy car showing my new design;  
FIG. 2 is a front view thereof;  
FIG. 3 is a rear view thereof;  
FIG. 4 is a left side view thereof;  
FIG. 5 is a right side view thereof;  
FIG. 6 is a top view thereof;  
FIG. 7 is a bottom view thereof; and,  
FIG. 8 is another perspective view thereof.

The broken lines shown are included for the purpose of illustrating the unclaimed portions of the article and form no part of the claimed design.

**1 Claim, 8 Drawing Sheets**

# Plant Patents

## ■ Plant Patent

- May be granted for the invention or discovery and asexual reproduction of any distinct and new variety of plant.
- Asexual reproduction is reproduction by means other than from seeds.
  - Ex: Rooting of cuttings, layering, budding, grafting.
- Only 1 claim is allowed.
- Term is 20 years from filing date.
- No maintenance fees required.
- Protects inventor's right to exclude others from asexually reproducing, selling, or using the plant reproduced.



US00PP24210P3

**(12) United States Plant Patent  
Barritt****(10) Patent No.: US PP24,210 P3  
(45) Date of Patent: Feb. 4, 2014****(54) APPLE TREE NAMED 'WA 38'****(50) Latin Name: *Malus domestica*  
Varietal Denomination: WA 38****(75) Inventor: Bruce H. Barritt, Okanogan Centre  
(CA)****(73) Assignee: Washington State University Research  
Foundation, Pullman, WA (US)****(\*) Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 93 days.**(21) Appl. No.: 13/385,545****(22) Filed: Feb. 23, 2012****(65) Prior Publication Data**  
US 2013/0227750 P1 Aug. 29, 2013**(51) Int. Cl.**  
**A01H 5/00** (2006.01)**(52) U.S. Cl.**  
USPC ..... **Plt./161****(58) Field of Classification Search**  
USPC ..... **Plt./161, 170**  
See application file for complete search history.**(56) References Cited****U.S. PATENT DOCUMENTS**PP7,197 P \* 3/1990 Luby et al. .... **Plt./161**

\* cited by examiner

Primary Examiner — Howard Locker

(74) Attorney, Agent, or Firm — Morrison &amp; Foerster LLP

**(57) ABSTRACT**A new and distinctive variety of a *Malus domestica* apple tree, named 'WA 38' that is distinguished by its intense and nearly full color, internal indices that are different than its parents, and its long common storage life.**4 Drawing Sheets****1**Latin name of the genus and species of the claimed plant:  
Botanical/commercial classification: *Malus domestica*/apple tree.

Varietal denomination: 'WA 38'.

**BACKGROUND OF THE INVENTION**The invention refers to a new plant variety of apple tree (*Malus domestica*) named 'WA 38'. This new variety is distinguished by its intense and nearly full color, internal indices that are different than its parents, and its long common storage life.

'WA 38' originated as a single seedling from a cross of the patented varieties 'Enterprise' (U.S. Plant Pat. No. 9,193) and 'Honeycrisp' (U.S. Plant Pat. No. 7,197) in Year 1. The germinated seedling was grown in a greenhouse at Wenatchee, Wash. In September of Year 2, 'WA 38' was chip budded onto 'M9' rootstock and the resulting tree was planted in the evaluation orchard at Douglas County, Wash. in the spring of Year 5. Fruit from this originally budded tree were observed in Year 7 and Year 8 and due to the unique fruit quality traits, 'WA 38' was selected and second generation trees were made by chip budding onto M9 rootstock in the fall of Year 8. Second generation trees were planted at three locations in Washington State near Chelan, Douglas County, Wash.; near East Wenatchee, Douglas County, Wash.; and near Basin City, Franklin County, Wash. A comparison of second generation trees against the originally budded tree, including trunk, branches, leaves, flowers, and fruit; showed them to be essentially the same and stable over the years checked (Years 12, 13, 14, and 15).

**SUMMARY OF THE INVENTION**

The 'WA 38' apple tree variety exhibits exceptionally long storage life in common storage. 'WA 38' loses little of its

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crispness, sugar, and acid following five months of storage, whereas that of its parents declines considerably. The appearance of 'WA 38' fruit is nearly full color and has an intensity that is unique among other apple varieties of the same season.

Like both its parents (i.e., 'Enterprise' and 'Honeycrisp'), 'WA 38' is heterozygous for the ACS1 gene and homozygous for the ACO1 gene, both of which are involved in ethylene production. These genes confer low ethylene production, which in turn affects storage life. The ACS1 and ACO1 genotypes were determined using the method described in Zhu and Barritt (2008). The harvest maturity of 'WA 38' is approximately three weeks later than that of the parental variety 'Honeycrisp', and approximately three weeks earlier than that of the parental variety 'Enterprise'. Additionally, the combination of fruit appearance and internal eating qualities of the fruit of 'WA 38' is distinctly different than that of the parental varieties 'Honeycrisp' and 'Enterprise'.

**BRIEF DESCRIPTION OF THE DRAWINGS**

FIG. 1. View of the dormant stage of 'WA 38' originally budded tree.

FIG. 2. View of blossoms from the originally budded tree of 'WA 38'.

FIG. 3. View of typical 'WA 38' originally budded tree fruit at harvest maturity.

FIG. 4. View comparing harvest mature fruit of 'WA 38' (top row), and its parents 'Enterprise' (center row), and 'Honeycrisp' (bottom row).

**DETAILED BOTANICAL DESCRIPTION**

The following detailed description, except for description of fruit, is from the 'WA 38' originally budded tree grown at Orondo, Douglas County, Wash. The 'WA 38' tree was 11 years old when measurements were taken. The USDA hardi-





US00PP24209P3

**(12) United States Plant Patent  
Finn****(10) Patent No.: US PP24,209 P3**  
**(45) Date of Patent: Feb. 4, 2014****(54) BLUEBERRY PLANT NAMED 'PERPETUA'****(50) Latin Name: *Vaccinium* sp. L. hybrid**  
**Varietal Denomination: Perpetua****(75) Inventor: Chad E Finn, Corvallis, OR (US)****(73) Assignee: The United States of America, as  
represented by the Secretary of  
Agriculture, Washington, DC (US)****(\*) Notice:** Subject to any disclaimer, the term of this  
patent is extended or adjusted under 35  
U.S.C. 154(b) by 78 days.**(21) Appl. No.: 13/506,291****(22) Filed: Apr. 9, 2012****(65) Prior Publication Data**  
US 2013/0269067 P1 Oct. 10, 2013**(51) Int. Cl.**  
**A01H 5/00 (2006.01)****(52) U.S. Cl.**  
USPC ..... **Plt./157****(58) Field of Classification Search**  
USPC ..... Plt./157  
See application file for complete search history.**(56) References Cited****U.S. PATENT DOCUMENTS**

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**Primary Examiner — Annette Para****(74) Attorney, Agent, or Firm — Gail E. Poulos; Lesley M. Shaw; John D. Fado****(57) ABSTRACT**

Description and specifications of a new and distinct ornamental blueberry cultivar that originated from seed produced from open pollinated flowers of CVAC 45 (PI 296412) is provided. This new ornamental blueberry can be distinguished by its ability to flower on new growth, its attractive combination of dark green and glossy leaves, along with flowers and edible fruit in late summer and fall; and its vigorous, vase-shaped, compact plant habit.

**4 Drawing Sheets****1**

Latin name of genus and species of the plant claimed: 'Perpetua' is a new blueberry plant that is a genus *Vaccinium* sp. L. hybrid.

Variety denomination: The new blueberry plant claimed is of the cultivar denomination 'Perpetua' containing mostly *Vaccinium* section *Cyanococcus* germplasm.

**BACKGROUND OF THE INVENTION**

The present invention relates to a new and distinct blueberry cultivar botanically known as *Vaccinium* sp. L. and herein referred to as 'Perpetua', as herein described and illustrated.

This new blueberry cultivar was discovered in Corvallis, Oreg. and originated from open pollinated seed of CVAC 45 (PI 296412) in the USDA-ARS National Clonal Germplasm Repository collection in Corvallis, Oreg. CVAC 45 was collected from the wild in 1963 in Monmouth, Me. and is listed as *Vaccinium corymbosum* L. (highbush blueberry) by the USDA-ARS, National Genetic Resources Program, *Germplasm Resources Information Network—(GRIN)* [Online Database]. When CVAC 45 was evaluated in the collection, it was noted for its small fruit size and autumn fruiting. The plant's characteristics for fruit size, leaf shape, and leaf size are intermediate to those of *V. corymbosum* and *V. angustifolium* Aiton (lowbush blueberry). Since both species are found in the region where the accession was collected, CVAC 45 is presumed to be a hybrid between these two species. Perpetua's overwintering buds break in the spring, flower and produce a crop like most blueberry plants. Perpetua is unique in that the new growth produces flower buds that proceed to break bud without winter dormancy and then flower and ripen

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a late-summer into fall crop. While many blueberries will produce a few fruit in the fall on 1-2 buds at the tip of the new growth, 'Perpetua' will flower on up to 12-16 nodes on the new growth. The plant also has very dark green and glossy leaves that are very attractive during the growing season and that turn deep red in the fall. The combination of flowers, edible fruit, and dark green foliage in the late summer and fall make this plant a particularly attractive edible ornamental. The new cultivar has been asexually multiplied annually since 2005 by the use of stem cuttings. The present invention has been found to be stable and reproduce true to type through successive asexual propagations.

**SUMMARY OF THE INVENTION**

The following are the most outstanding and distinguishing characteristics of this new cultivar when grown under normal horticultural practices in Oregon. 1. Ability to flower on new growth without any chilling; 2. Attractive combination of flowers and fruit in late summer and fall; 3. Dark green, glossy, attractive leaves; 4. Edible fruit; and 5. Vigorous and compact plant habit.

**BRIEF DESCRIPTION OF THE PHOTOGRAPHS**

The accompanying color photographs show typical specimens of the flower cluster in bloom and the dark green glossy leaves (FIG. 1), the fruit (FIG. 2), the range of ripening stages of the fruit from green through full ripe (FIG. 3), and a five year old plant with a ripening crop in September (FIG. 4).



US00PP21603P3

**(12) United States Plant Patent**  
**Phillely et al.****(10) Patent No.: US PP21,603 P3**  
**(45) Date of Patent: Dec. 28, 2010****(54) ST. AUGUSTINEGRASS PLANT NAMED**  
**'MSA-31'****(50) Latin Name: *Stenotaphrum secundatum***  
**Varietal Denomination: MSA-31****(75) Inventors: H. Wayne Phillely, Mathiston, MS (US);**  
**Jeffrey V. Krans, Manitowish, WI (US);**  
**Clarence E. Watson, Stillwater, OK**  
**(US)****(73) Assignee: Mississippi State University,**  
**Mississippi State, MI (US)****(\*) Notice:** Subject to any disclaimer, the term of this  
patent is extended or adjusted under 35  
U.S.C. 154(b) by 176 days.**(21) Appl. No.: 12/154,431****(22) Filed: May 22, 2008****(65) Prior Publication Data**  
US 2009/0293164 P1 Nov. 26, 2009**1**Latin name: *Stenotaphrum secundatum*.  
Varietal denomination: 'MSA-31'.**BACKGROUND OF THE INVENTION**

This invention relates to a new and distinct perennial variety of St. Augustinegrass that is well-suited for turfgrass applications. It is a high-quality, high-density cultivar well-adapted for warm weather climates similar to that found in southern climates where high quality St. Augustinegrass grass cultivar varieties have previously not been available. The Latin name of the genus and species of the new cultivar disclosed herein is *Stenotaphrum secundatum*. This novel hybrid genotype has been given the varietal denomination 'MSA-31' and is a perennial, asexually propagated genotype of St. Augustinegrass, which typically grows vigorously well in warm weather climates and spreads through creeping stolons that root at the nodes contacting soil with adequate moisture. Commonly-known varieties of this genus and species include Raleigh St. Augustine (not patented), 'Floritam' (not patented), B12 (U.S. Plant Pat. No. 16,174 and marketed under the tradename 'Sapphire™'), and SS-100 (U.S. Plant Pat. No. 9,395 and marketed under the tradename 'Palmetto™'). This high quality novel and distinct variety of St. Augustinegrass was first vegetatively propagated at Starkville, Miss. using stolon cuttings and asexually propagated from the time forward to maintain a single genotype.

**SUMMARY OF THE INVENTION**

The cultivar 'MSA-31' is a new and distinctive variety of St. Augustinegrass characterized by its unique pedigree and very good shade tolerance and high turf quality. The traits of the invention are continually maintained when propagated asexually. This new variety provides an excellent appealing uniform, dense, dark green turf at locations where other St. Augustinegrasses are weakened by excessive shade and disease injury. 'MSA-31' exhibits other excellent qualities and

**(51) Int. Cl.**  
**A01H 5/00 (2006.01)****(52) U.S. Cl. .... Plt./392****(58) Field of Classification Search .... Plt./392**  
See application file for complete search history.**Primary Examiner—Kent L. Bell****(74) Attorney, Agent, or Firm—Lawrence Arthur Schemmel****(57) ABSTRACT**

St. Augustinegrass plant 'MSA-31' is a new and distinct variety of perennial St. Augustinegrass cultivar, characterized by its short and narrow leaf blades, fine leaf texture, short internode length and diameter, and superior turf quality and particularly turf density when grown under shade or dense shade. 'MSA-31' is also distinguished by its genetic color and fall and winter color characteristics.

**9 Drawing Sheets****2**

characteristics such as turf density, fine leaf texture, fall and winter color, fast spring green up at warm sites, and excellent low seedhead ratings compared to other St. Augustinegrass cultivars which allow it to be further distinguished from other cultivars.

**BRIEF DESCRIPTION OF THE DRAWINGS**

FIG. 1 is a flow chart diagram and graphical illustration of the unique pedigree of 'MSA-31' showing the crossing of St. Augustinegrass genotypes resulting in the distinctive new cultivar.

FIG. 2 is a color photograph taken on Apr. 24, 2006 at greenhouses in Starkville, Miss. of stolon segments of four (4) St. Augustinegrass cultivars that compares and illustrates the distinct morphologies of each segment. From left to right, 'Floritam' with its long leaves and purple internodes is shown on the far left. Next in line to the right is 'Raleigh' with its long leaves and green/yellow internodes. Next in line to the right is 'MSA 2-3-98' with its small leaves and green internodes. Finally on the far right, 'MSA-31' is shown with its small leaves and dark green internodes.

FIG. 3 is a color photograph taken on Apr. 24, 2006 at greenhouses in Starkville, Miss. of four (4) whole non-mown St. Augustinegrass cultivar plants in growing pots showing, from left to right: 'Floritam' with its longer leaves, tall stature, and purple/red internodes; 'Raleigh' with its longer leaves, tall stature, and green/yellow internodes; 'MSA 2-3-98' with its smaller leaves, shorter stature, and more green internodes; and 'MSA-31' with its small leaves, shorter stature, and darker green internodes.

FIG. 4 is a color photograph taken on Oct. 26, 2004 at Starkville, Miss. during the 2002 NTEP test showing the turf density of the 'MSA-31' St. Augustinegrass cultivar.

FIG. 5 is a color photograph taken on Oct. 26, 2004 at Starkville, Miss. during the 2002 NTEP test showing field plots of six (6) cultivars (1 full replication), specifically depicting 'Raleigh' in the left foreground, 'MSA-31' St.



US00PP21540P2

**(12) United States Plant Patent**  
**Knight et al.****(10) Patent No.: US PP21,540 P2**  
**(45) Date of Patent: Nov. 30, 2010**

- (54) **CRAPEMYRTLE PLANT NAMED 'CHOCOLATE MOCHA'**
- (50) Latin Name: *Lagerstroemia indicaxLagerstroemia indicaxfauriei*  
Varietal Denomination: *Crapemyrtle 'Chocolate Mocha'*
- (75) Inventors: **Patricia R. Knight**, Biloxi, MS (US);  
**Wayne J. McLaurin**, Poplarville, MS (US)
- (73) Assignee: **Mississippi State University**, Mississippi State, MS (US)
- (\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.
- (21) Appl. No.: **12/455,315**
- (22) Filed: **May 29, 2009**

- (51) **Int. Cl.**  
**A01H 5/00** (2006.01)
- (52) **U.S. Cl.** ..... **Plt./252**
- (58) **Field of Classification Search** ..... **Plt./252**  
See application file for complete search history.

*Primary Examiner*—Annette H Para  
(74) *Attorney, Agent, or Firm*—Lawrence Arthur Schemmel

**(57) ABSTRACT**

A new and distinct variety of *Lagerstroemia* crapemyrtle plant named 'Chocolate Mocha', characterized by its combination of deep dark brown/red-purple leaf color and brilliant bubble gum pink flower color. 'Chocolate Mocha' is also distinguished by its resistance to leaf scorch, upright non-spreading growth, and medium growth size.

**3 Drawing Sheets****1****STATEMENT OF GOVERNMENT SUPPORT**

This invention was made with government support under 58-6404-0-014 awarded by the U.S. Department of Agriculture. The government may have certain rights in the invention.

Botanical classification: *Lagerstroemia indicaxLagerstroemia indicaxfauriei*.

Varietal denomination: *Crapemyrtle 'Chocolate Mocha'*.

**BACKGROUND OF THE INVENTION**

The present invention relates to a new and very distinct variety or cultivar of the ornamental flowering shrub and landscape plant of the genus *Lagerstroemia*, commonly known as crapemyrtle, of the family Lythraceae, and is referred to hereinafter by its varietal denomination 'Chocolate Mocha'. This novel plant is an asexually propagated hybrid of crapemyrtle that was selected in 2003 from approximately 3600 identified crosses. The female seed parent is *Lagerstroemia indica* 'Whit IV' ('Red Rocket'), U.S. Pat. No. 11,342. The male pollen parent is *Lagerstroemia indicaxfauriei* 'Sarah's Favorite' (unpatented). 'Chocolate Mocha' was selected for its unusual and brilliant bubble gum pink flower color and other distinctive features. The designation 'Chocolate Mocha' was evaluated under the experimental name 'CREC 2003-01'. This high quality novel and distinct variety of crapemyrtle plant was vegetatively propagated at the Mississippi State University Coastal Research and Extension Center, South Mississippi Branch Experiment Station, in Poplarville, Miss. Each of several generations of cuttings has produced stable plants identical to the original seedling plant.

**SUMMARY OF THE INVENTION**

The cultivar 'Chocolate Mocha' is a distinctive, new variety of crapemyrtle plant characterized by its brilliant bubble gum pink flower color and unique dark brown/red-purple leaf color. The traits of the invention are continually maintained

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when propagated asexually. This new variety may vary slightly with changes in location, temperature, light, and other environmental conditions, but the genotype will not be affected. 'Chocolate Mocha' also exhibits the quality and characteristic of adaptability to all areas of hardiness zones 7-10. Compared to its parents, its female parent 'Red Rocket' generally has light green leaves that fade through the growing season and red flower color. Red Rocket's new growth red leaf color is lighter than that of 'Chocolate Mocha'. The new plant's male parent 'Sarah's Favorite' generally has medium green leaves and white flower color. The combination of Chocolate Mocha's dark brown/red-purple leaf color and brilliant pink flower color distinguishes it from these and all other crapemyrtle cultivars.

**BRIEF DESCRIPTION OF THE DRAWINGS**

The color photographs illustrate the unique characteristics of leaf and flower color of the new variety. The photographs show the colors as true as is reasonably possible to obtain with current photographic techniques. Colors in the photographs may differ from the actual colors and values in the description of the new crapemyrtle plant due to light conditions and other factors.

FIG. 1 is a color photograph of the new crapemyrtle 'Chocolate Mocha' taken at the Coastal Research and Extension Center, South Mississippi Branch Experiment Station, that shows the flower color against a background of the leaf color of the new cultivar.

FIG. 2 is a color photograph of the new crapemyrtle 'Chocolate Mocha' taken at the Coastal Research and Extension Center South Mississippi Branch Experiment Station, that shows the leaf color and the twig color of the new cultivar.

FIG. 3 is a color photograph of the new crapemyrtle 'Chocolate Mocha' taken at the Coastal Research and Extension Center South Mississippi Branch Experiment Station, that shows new growth of the new cultivar with older growth in the background.

# Plant Variety Protection

- Plant Variety Protection Office of the USDA administers the Plant Variety Protection Act of 1970 by issuing Certificates of Protection.
- Act provides legal intellectual property rights protection to breeders of new varieties of plants that are sexually reproduced (by seed) or tuber-propagated.
- Term of protection generally is 20 years from date of issue of certificate.
  - Term of protection for trees or vines is 25 years from date of issue of certificate.



# Provisional Patent Applications

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- USPTO has offered this option since June, 1995.
- Simple, lower cost first patent filing for small and micro entities.
- Provides one year to assess commercial potential before filing more expensive and detailed utility (non-provisional) application.
- No claims are required.
- No oath or declaration is required.
- Provides an early effective filing date.

# Provisional Patent Applications

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- Permits an inventor or owner to use “Patent Pending” in connection with the invention.
- Allows inventor or owner to commercially promote the invention with some additional security against theft.
- Preserves application in confidence – is not published.
- Not available for design inventions.
- Regular utility (non-provisional) application must be filed within 12 months of the provisional filing date in order to maintain and benefit from the provisional filing date.

# Provisional Patent Applications

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- The subject matter in the later-filed utility is then entitled to the benefit of the effective filing date of the provisional if it has full support in the written description of the provisional application.
- Not examined on the merits like a utility application.
- Inventors must be aware that the “in use” or “on-sale” statutory bar conditions apply so that:
  - Patent rights may be affected if conditions exist and 1 year provisional application period expires without filing a utility application.

# Utility Patents

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- Utility Patent protects functionality
  - May be granted for the invention or discovery of any new, useful, and non-obvious:
    - Process, method, or system
    - Machine
    - Article of manufacture
    - Composition of matter
    - New and useful uses or improvements of the 4 above.
  - Personal property that may be sold, mortgaged, assigned or licensed.
    - May be jointly-owned.

# Utility Patents

- Invention must be new (novel):
  - Not exactly the same as prior products and processes.
  - Invention is not patentable if:
    - Known to the public before it was invented;
    - Described in a publication more than 1 year prior to filing date; or
    - Disclosed, used publicly, sold, or offered for sale to the public more than 1 year prior to filing date.

# Utility Patents

- Invention must be useful:
  - Must have a useful purpose and be operative for the intended purpose.
- Invention must be non-obvious:
  - Usually the most difficult hurdle to cross.
  - Must be non-obvious or a non-obvious improvement over the prior art to one of ordinary skill in the art or technology of the invention at the time of the invention.
  - Examiner can combine prior art references to reject application claims as obvious in view of those references.
  - Objections and/or rejections must be overcome in order to proceed with patent prosecution.



US008450414B2

**(12) United States Patent**  
**Thames et al.****(10) Patent No.: US 8,450,414 B2**  
**(45) Date of Patent: May 28, 2013****(54) GLYCEROL ESTER-FREE  
FUNCTIONALIZED VEGETABLE OIL  
DERIVATIVES AND THEIR LATEX  
COMPOUNDS****(75) Inventors:** Shelby F. Thames, Hattiesburg, MS  
(US); James W. Rawlins, Petal, MS  
(US); Sharathkumar K. Mendon,  
Hattiesburg, MS (US); David Delatte,  
Hattiesburg, MS (US)**(73) Assignee:** The University of Southern  
Mississippi, Hattiesburg, MS (US)**(\*) Notice:** Subject to any disclaimer, the term of this  
patent is extended or adjusted under 35  
U.S.C. 154(b) by 330 days.**(21) Appl. No.:** 12/331,115**(22) Filed:** Dec. 9, 2008**(65) Prior Publication Data**  
US 2009/0143527 A1 Jun. 4, 2009**Related U.S. Application Data****(62)** Division of application No. 11/699,693, filed on Jan.  
30, 2007, now abandoned.**(51) Int. Cl.**  
**C08F 2/22** (2006.01)**(52) U.S. Cl.**  
USPC ..... 524/812; 524/801; 524/804; 526/238.3**(58) Field of Classification Search**  
USPC ..... 524/801, 804, 812; 526/238.3  
See application file for complete search history.**(56) References Cited****U.S. PATENT DOCUMENTS**

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Primary Examiner — Liam Heincer

Assistant Examiner — Michael A Salvitti

(74) Attorney, Agent, or Firm — Lawrence Arthur Schemmel

**(57) ABSTRACT**

The present invention is directed to a fatty amide (meth)acrylate monomer, methods of making the monomer, and latex polymers comprising the fatty amide (meth)acrylate monomer. The monomers are derived by reacting unsaturated vegetable oils with ethanolamine or substituted ethanolamine. The vegetable oil derivative is then reacted with either (meth)acryloyl chloride or (meth)acrylic acid to form a fatty amide (meth)acrylate monomer or the product of the reaction of hydroxyethyl (meth)acrylate reacted with isophorone diisocyanate to form a urethane fatty amide (meth)acrylate monomer. The increased hydrophilicity of the fatty amide (meth)acrylate monomer facilitates the diffusion through the aqueous phase. The monomer synthesis is designed to be glycerol ester-free to increase long term stability for monomers and polymers.

**16 Claims, No Drawings**



US008631590B2

(12) **United States Patent**  
Droege et al.

(10) **Patent No.:** US 8,631,590 B2  
(45) **Date of Patent:** Jan. 21, 2014

(54) **ARTICLE OF FOOTWEAR FOR SOCCER**

(75) **Inventors:** John Droege, Portland, OR (US); Paul Hooper, Vancouver, WA (US); Tetsuya T. Minami, Portland, OR (US); Morgan Stauffer, Portland, OR (US)

(73) **Assignee:** NIKE, Inc., Beaverton, OR (US)

(\*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 744 days.

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(22) **Filed:** Jun. 4, 2008

(65) **Prior Publication Data**  
US 2009/0300945 A1 Dec. 10, 2009

(51) **Int. Cl.**  
A43B 13/00 (2006.01)  
A43B 13/14 (2006.01)  
A43B 13/38 (2006.01)  
A43B 23/00 (2006.01)  
A43B 1/10 (2006.01)  
A43B 5/02 (2006.01)

(52) **U.S. Cl.**  
USPC ..... 36/103; 36/30 R; 36/128; 36/102

(58) **Field of Classification Search**  
USPC ..... 36/91, 102, 103, 59 C, 8.3, 43, 44, 30 R, 36/31, 145, 126-129, 107, 108, 76 R, 155  
See application file for complete search history.

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*Primary Examiner* — Jila M Mohandesi

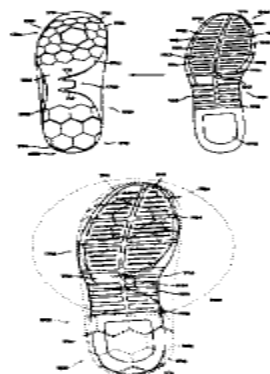
*Assistant Examiner* — Tiffany Drake

(74) *Attorney, Agent, or Firm* — Plumsea Law Group, LLC

(57) **ABSTRACT**

An article of footwear with flexing portions disposed in an arch portion of a sole system is disclosed. The flexing portions in the sole system increase the curling toe flexibility of the article of footwear. In addition, the sole system includes trapping portions that enhance the ability of a wearer to stop and capture a ball. Furthermore, the article of footwear includes an asymmetric fastening system biased toward a medial side of the article.

**30 Claims, 27 Drawing Sheets**







US008642752B2

(12) **United States Patent**  
**Swayze et al.**(10) **Patent No.:** **US 8,642,752 B2**  
(45) **Date of Patent:** **Feb. 4, 2014**(54) **MODULATION OF HEPATITIS B VIRUS (HBV) EXPRESSION**(75) Inventors: **Eric E. Swayze**, Encinitas, CA (US);  
**Susan M. Freiler**, San Diego, CA (US);  
**Michael L. McCaleb**, La Jolla, CA (US);  
**Hong Zhang**, Fremont, CA (US)(73) Assignee: **Isis Pharmaceuticals, Inc.**, Carlsbad, CA (US)

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **13/452,703**(22) Filed: **Apr. 20, 2012**(65) **Prior Publication Data**

US 2013/0035366 A1 Feb. 7, 2013

**Related U.S. Application Data**

(60) Provisional application No. 61/478,040, filed on Apr. 21, 2011, provisional application No. 61/478,038, filed on Apr. 21, 2011, provisional application No. 61/596,690, filed on Feb. 8, 2012, provisional application No. 61/596,692, filed on Feb. 8, 2012.

(51) **Int. Cl.**  
**C07H 21/04** (2006.01)  
**C12N 15/113** (2010.01)(52) **U.S. Cl.**  
USPC ..... **536/24.5; 514/44 A**(58) **Field of Classification Search**  
None  
See application file for complete search history.(56) **References Cited****U.S. PATENT DOCUMENTS**

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Branch et al., "A good antisense molecule is hard to find," *TIBS* (1998) 23:45-50.

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(Continued)

**Primary Examiner** — Tracy Vivimore(74) **Attorney, Agent, or Firm** — Isis Pharmaceuticals, Inc.  
Patent Dept.(57) **ABSTRACT**

Disclosed herein are antisense compounds and methods for decreasing HBV mRNA, DNA and protein expression. Such methods, compounds, and compositions are useful to treat, prevent, or ameliorate HBV-related diseases, disorders or conditions.

**37 Claims, No Drawings**

# Utility Patents

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- Must include a written specification (description and at least 1 claim).
- Must include an oath or declaration (lists the inventors and declares they are the inventors).
- Must include a drawing, if necessary to understand the subject matter.
- Must include filing fee, search fee, examination fee, and additional claim fees, if applicable.

# Utility Patents

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- Claims define the scope of the protection provided by the patent and are the heart of an application:
  - Independent claims stand by themselves.
  - Dependent claims refer back to and limit another claim or claims.
  - Are analogous to the metes and bounds system of describing land (real property) boundaries.

# Utility Patents

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- Cost depends on multiple factors:
  - Filing fee for regular, small, or micro entity status
  - No. of independent claims
  - No. and types of dependent claims
  - Search fee
  - Issue fee
  - Publication fee
  - Examination fee
  - Other factors (non-English, surcharges)
  - Invention Complexity
  - Prior Art Searching Costs
  - Periodic Maintenance Fees

# Utility Patents

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- Prior art search should generally be conducted prior to application and an Information Disclosure Statement (IDS) filed.
- Examination may be expedited in certain cases.
- Examination may take 18 months or longer for first Office Action.
- Application pendency was an average of 33.7 months (FY 2011, USPTO data) and 32.4 months (2012).
- Application is published approx. 18 months from the earliest priority date unless requested otherwise.

# Utility Patents

- Applicant must respond to possible multiple Office Actions:
  - Objections / Rejections
- If granted, patent is valid for 20 years from the date of filing of the application in the U.S.
  - Patents in force on June 8, 1995 and those issued after on applications filed prior to June 8, 1995 have a term that is the greater of 20 years from filing or 17 years from grant.
- Maintenance fees are due 3.5, 7.5, and 11.5 years after the date of patent grant.
- Patent terms may be extended for certain patents, when certain periods of delay are beyond the applicant's control, for example if a drug patent required FDA approval that was not granted until after the patent was granted.

# Utility Patents

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They got a patent on what??



US006637447B2

**(12) United States Patent**  
**McMullin et al.****(10) Patent No.: US 6,637,447 B2**  
**(45) Date of Patent: Oct. 28, 2003****(54) BEERBRELLA****(76) Inventors:** **Mason Schott McMullin**, #7 Ridgetop St., St. Louis, MO (US) 63117; **Robert Platt Bell**, 8033 Washington Rd., Alexandria, VA (US) 22308; **Mark Andrew See**, 8033 Washington Rd., Alexandria, VA (US) 22308**(\*) Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 33 days.**(21) Appl. No.: 09/981,966****(22) Filed: Oct. 19, 2001****(65) Prior Publication Data**

US 2003/0075208 A1 Apr. 24, 2003

**(51) Int. Cl.<sup>7</sup> ..... A45B 11/00; A45B 13/00; A45B 23/00****(52) U.S. Cl. .... 135/16; 220/694; 206/217****(58) Field of Search .... 135/16; 220/694; 220/703; 215/386, 400; D3/5; 248/519, 534, 231.81, 230.7; 206/217****(56) References Cited****U.S. PATENT DOCUMENTS**

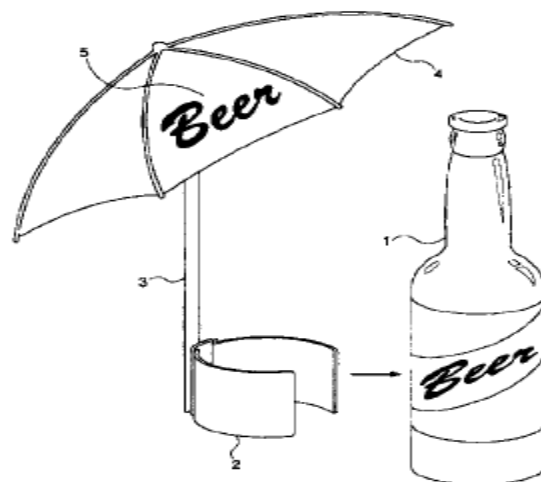
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**Primary Examiner**—Robert Canfield**(74) Attorney, Agent, or Firm**—Robert Platt Bell**(57) ABSTRACT**

The present invention provides a small umbrella ("Beerrella") which may be removably attached to a beverage container in order to shade the beverage container from the direct rays of the sun. The apparatus comprises a small umbrella approximately five to seven inches in diameter, although other appropriate sizes may be used within the spirit and scope of the present invention. Suitable advertising and/or logos may be applied to the umbrella surface for promotional purposes. The umbrella may be attached to the beverage container by any one of a number of means, including clip, strap, cup, foam insulator, or as a coaster or the like. The umbrella shaft may be provided with a pivot to allow the umbrella to be suitably angled to shield the sun or for aesthetic purposes. In one embodiment, a pivot joint and counterweight may be provided to allow the umbrella to pivot out of the way when the user drinks from the container.

**10 Claims, 5 Drawing Sheets**



[54] **PEDAL OPERATED MOWER**

[76] Inventor: Deanna F. Porath, P.O. Box 7464,  
Montgomery, Ala. 36107

[21] Appl. No.: 393,408

[22] Filed: Jun. 29, 1982

[51] Int. Cl.<sup>3</sup> ..... A01D 53/02

[52] U.S. Cl. .... 56/249; 56/2

[58] Field of Search ..... 56/249, 2, 13.5;  
280/261

[56] **References Cited**

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Primary Examiner—J. N. Eskovitz

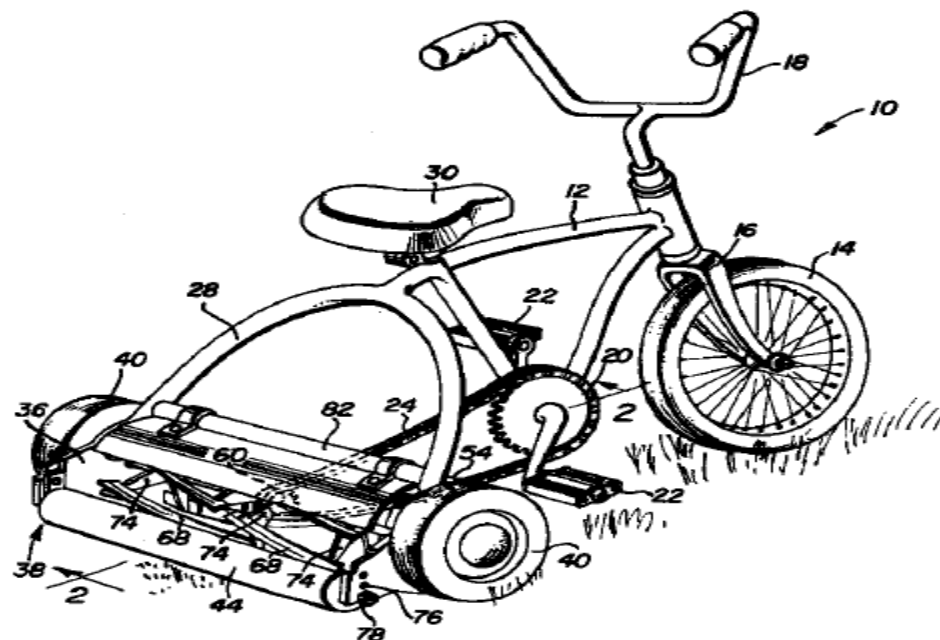
Attorney, Agent, or Firm—Harvey B. Jacobson

[57]

**ABSTRACT**

A tricycle frame providing basic support for the pedal operated mower, pedals turning a forward sprocket for providing locomotion, the locomotion communicating by a chain to turn a rear sprocket mounted on a shaft having a set of split cutting blades peripherally disposed about the cutting shaft for turning the shaft and cutting blades, and gear means connecting the cutter shaft with rear wheels of the tricycle frame and resulting in the locomotion thereof. A protective shield is mounted on the tricycle frame to protect the operator from debris thrown up during the course of mowing, and also a set of goose neck handle bars, an appropriate sized front wheel and a large triangular padded seat are also provided in the combination.

8 Claims, 3 Drawing Figures





US 20100319716A1

(19) **United States**(12) **Patent Application Publication**  
**Tao**(10) **Pub. No.: US 2010/0319716 A1**(43) **Pub. Date: Dec. 23, 2010**(54) **SMOKING DEVICE USING A LASER DIODE  
AS A SOURCE OF IGNITION****Publication Classification**(51) **Int. Cl.***A24F 1/30*

(2006.01)

*A24F 3/00*

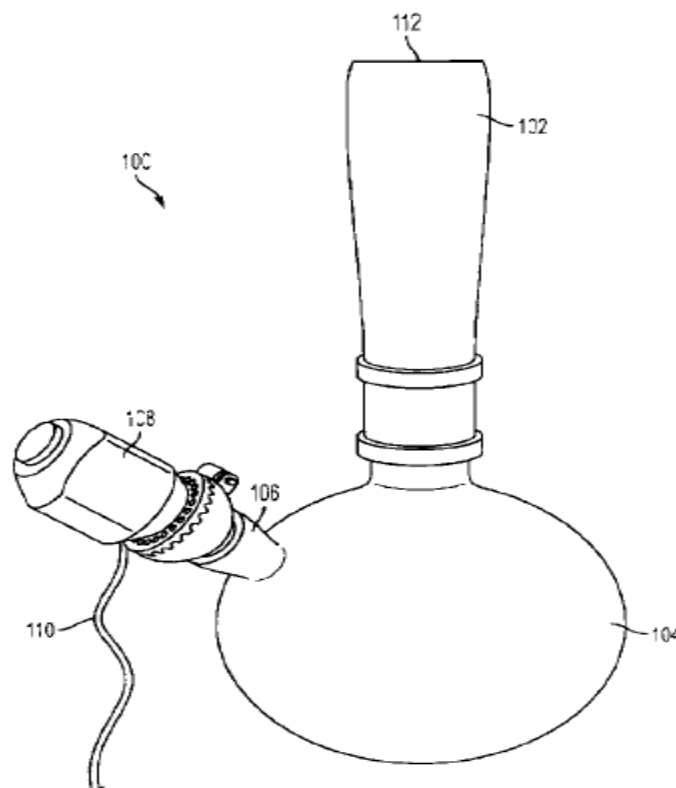
(2006.01)

(52) **U.S. Cl.** 131/173; 131/185

(57)

**ABSTRACT**

A smoking device, such as a water pipe or a bong, having an integrated laser diode ignition source. The laser diode ignition source provides a long-lasting life span, and does not require the smoker to use a fuel-based lighter that is not recyclable and requires continuous refilling of the fuel cartridge. Furthermore, the laser diode ignition source does not leave any undesirable aftertaste to the organic material. The ignition source is located within a housing, protected from the environment and wind. The ignition source applies a high intensity laser beam to ignite organic material, such as smokable substances, locating within a bowl adjacent to the ignition source.

(76) **Inventor: Chris Tao, Kent, CT (US)****Correspondence Address:****Maulin V. Shah, Esq.****1375 Broadway, Third Floor  
New York, NY 10018 (US)**(21) **Appl. No.: 12/489,437**(22) **Filed: Jun. 23, 2009**



US006490999B1

**(12) United States Patent  
Boys****(10) Patent No.: US 6,490,999 B1  
(45) Date of Patent: Dec. 10, 2002****(54) COLLAR APPARATUS ENABLING SECURE  
HANDLING OF A SNAKE BY TETHER****(75) Inventor: Donald Robert Martin Boys, Bella  
Vista, CA (US)****(73) Assignee: Central Coast Patent Agency, Inc.,  
Aromas, CA (US)****(\*) Notice:** Subject to any disclaimer, the term of this  
patent is extended or adjusted under 35  
U.S.C. 154(b) by 0 days.**(21) Appl. No.: 09/942,485****(22) Filed: Aug. 29, 2001****(51) Int. Cl.<sup>7</sup> ..... A01K 27/00****(52) U.S. CL ..... 119/792; 119/654; 119/769;  
119/795; 119/856; 119/864; 119/865****(58) Field of Search ..... 119/792, 760,  
119/769, 795, 815, 816, 864, 865, 714,  
821, 654, 856****(56) References Cited****U.S. PATENT DOCUMENTS**

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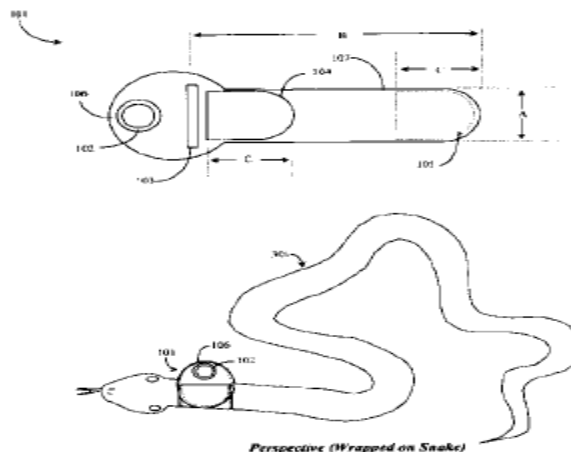
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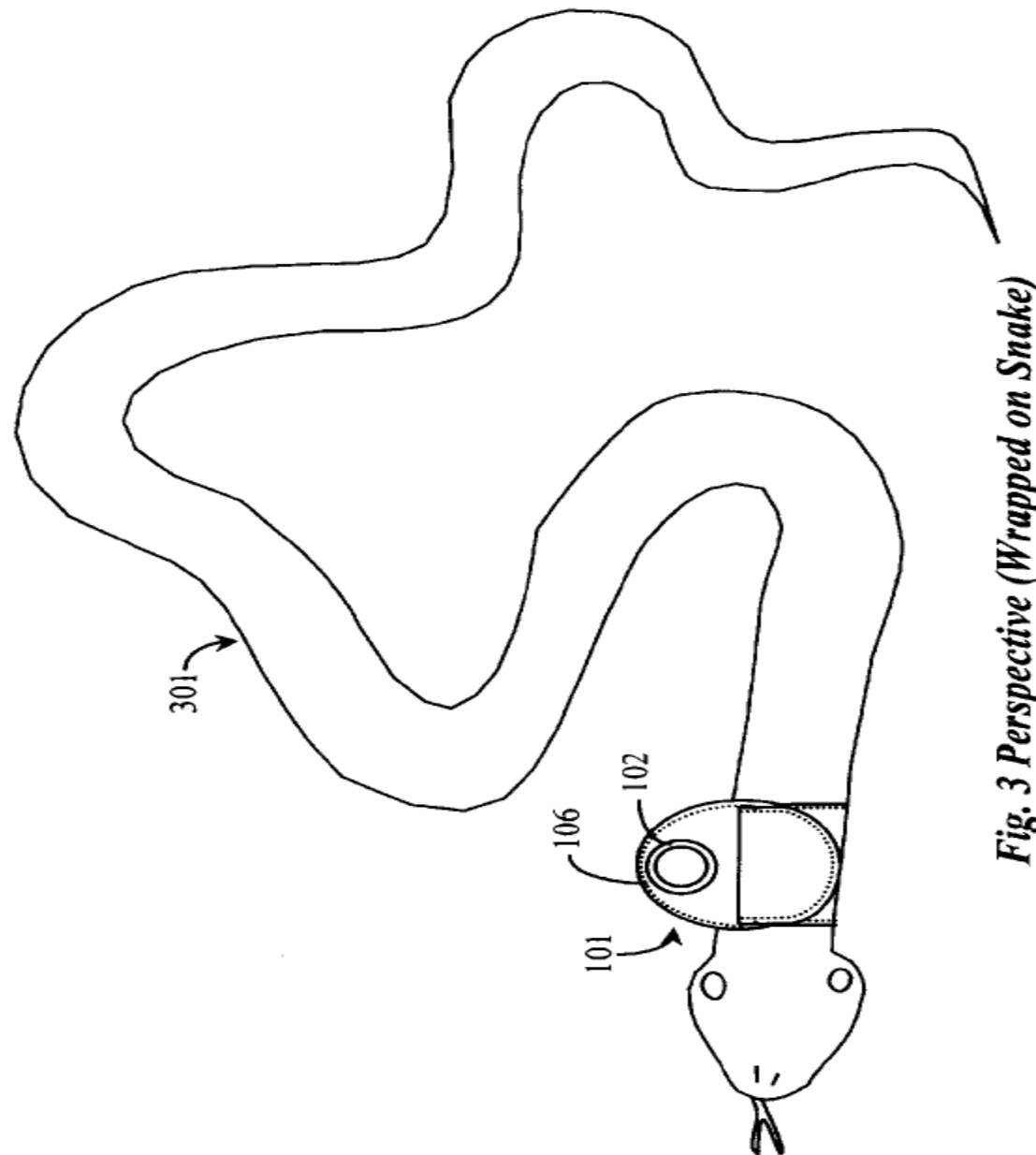
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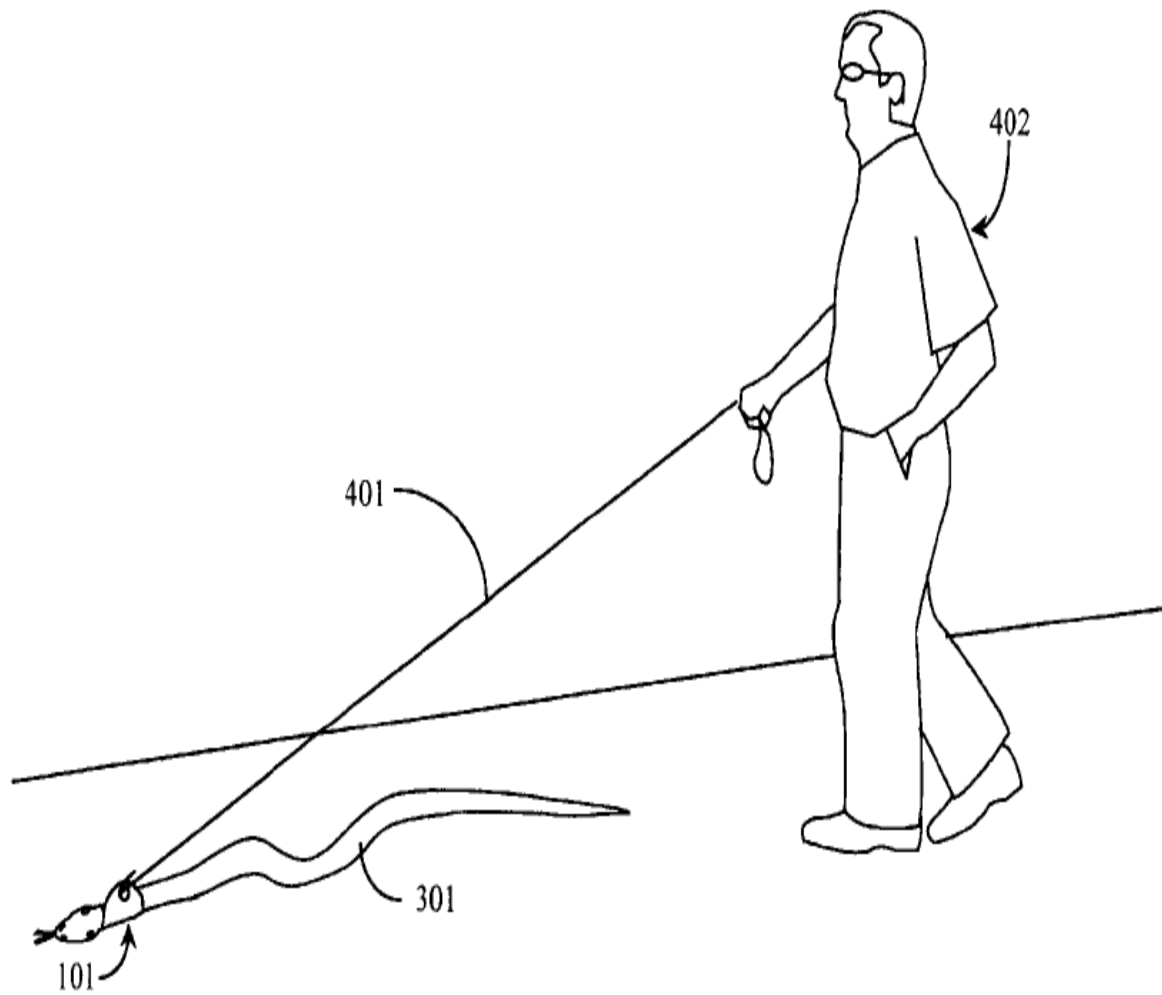
*Primary Examiner*—Charles T. Jordan*Assistant Examiner*—Bret Hayes**(74) Attorney, Agent, or Firm**—Donald R. Boys; Central  
Coast Patent Agency, Inc.**(57) ABSTRACT**

A collar for collaring a snake has an elongated collar section forming a physical collar when wrapped around the body portion of the snake. The collar further has a support section for supporting an attachment mechanism for accepting attachment of a tether and a connector system comprising at least two components affixed to strategic portions of the collar section for securing the collar in place around the body portion of the snake. The length of the collar section is such that a portion thereof overlaps itself when fitted around the snake providing an adjustable interface containing separate components of the connector system whereby mating the connector components together, secures the collar in place on the snake. In one embodiment the collar apparatus further includes a concertina movement-neutralization device for reducing concertina movement through the collar.

**14 Claims, 5 Drawing Sheets**



*Fig. 3 Perspective (Wrapped on Snake)*



*Fig. 4*



US006854374B1

**(12) United States Patent**  
**Breazeale****(10) Patent No.: US 6,854,374 B1**  
**(45) Date of Patent: Feb. 15, 2005****(54) EXPLOSION CONTAINMENT NET****(76) Inventor:** O. Alan Breazeale, 8307 County Rd.,  
6920, Lubbock, TX (US) 79407**(\*) Notice:** Subject to any disclaimer, the term of this  
patent is extended or adjusted under 35  
U.S.C. 154(b) by 0 days.**(21) Appl. No.:** 10/638,505**(22) Filed:** Aug. 12, 2003**(51) Int. Cl.:** F42B 33/06; F42B 12/34;  
F42B 12/36**(52) U.S. Cl.:** 86/50; 102/502; 102/504**(58) Field of Search:** 86/50; 102/502;  
102/504**(56) References Cited****U.S. PATENT DOCUMENTS**

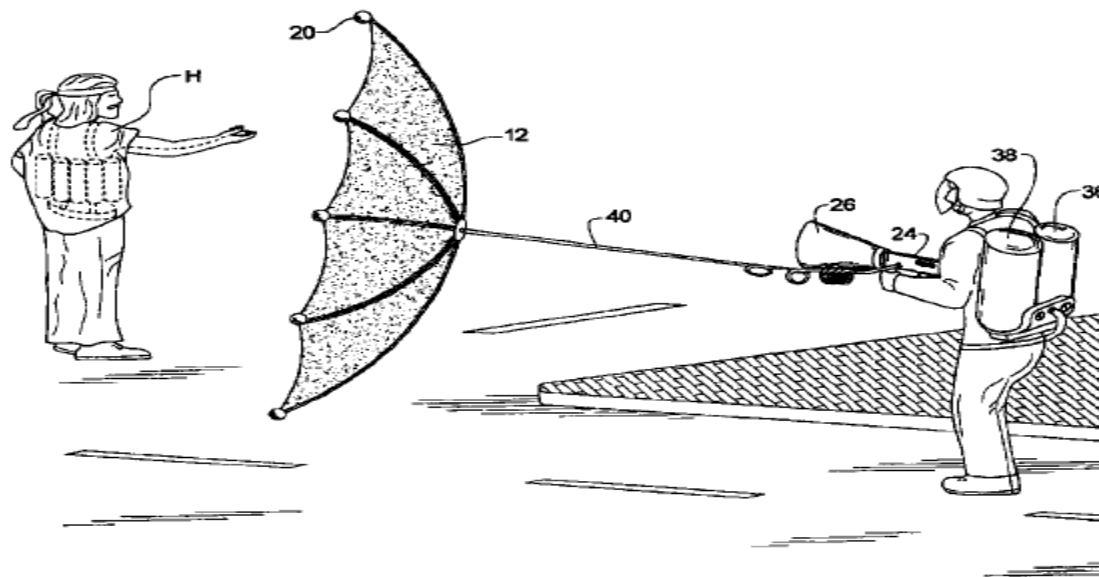
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*Primary Examiner*—Teri P. Luu*Assistant Examiner*—Bret Hayes*(74) Attorney, Agent, or Firm*—Peter Löffler**(57)****ABSTRACT**

A net is made from an explosive resistant material such as KEVLAR and is thrown over an explosive-laden device such that the net helps contain the blast force of the explosive-laden device. The net also has a nozzle that is fluid connected to a fire suppressant agent as well as a high density foam, each of which are discharged through the nozzle once the net is thrown over the explosive-laden device, the fire suppressant agent and the high density foam each helping to minimize the blast force of the explosive-laden device. The net can be thrown manually or can be fired from a gun that uses either pneumatic force or a firing cartridge to propel the net at its target.

**9 Claims, 4 Drawing Sheets**



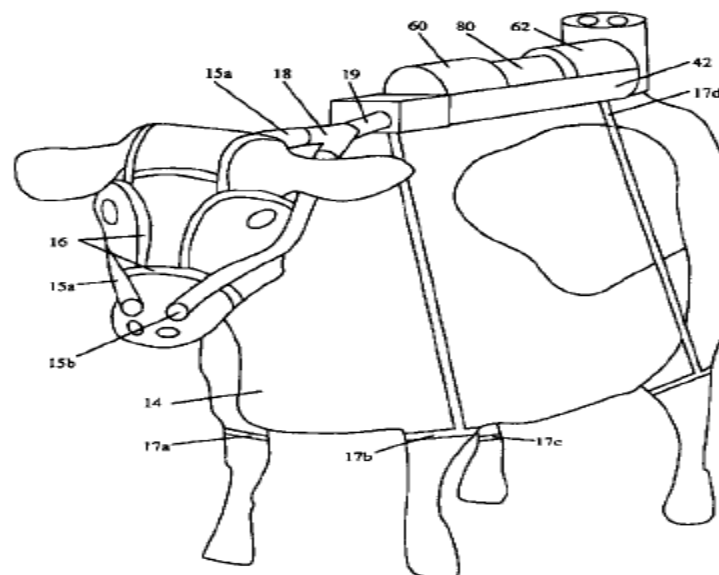
US006982161B1

**(12) United States Patent**  
**Herrema****(10) Patent No.: US 6,982,161 B1**  
**(45) Date of Patent: Jan. 3, 2006****(54) PROCESS FOR THE UTILIZATION OF RUMINANT ANIMAL METHANE EMISSIONS****(76) Inventor: Markus Donald Herrema**, 3 Hancock St., Laguna Niguel, CA (US) 92677**(\*) Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 118 days.**(21) Appl. No.: 10/687,272****(22) Filed: Oct. 15, 2003****(51) Int. Cl.**  
**C12N 1/30** (2006.01)  
**A61K 35/42** (2006.01)  
**(52) U.S. Cl.** 435/250; 424/557; 435/252.1; 435/289.1**(58) Field of Classification Search** 435/250, 435/252.1, 289.1; 424/543, 557  
See application file for complete search history.**(56) References Cited****U.S. PATENT DOCUMENTS**

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D'Aquino, "Methane to Protein," at <http://www.aptagen.com/corporate/AptagenDocuments/Articles/che.html>.**Primary Examiner**—Robert A. Wax  
**Assistant Examiner**—Rosanne Kosson**(57) ABSTRACT**

A process for the utilization of the methane contained within ruminant animal exhalation, specifically to a process that utilizes the methane contained within ruminant animal exhalation as a source of carbon and/or energy for the production of methane-utilizing microorganisms in a microorganism growth-and-harvest apparatus.

**14 Claims, 3 Drawing Sheets**



US007976572B2

**(12) United States Patent**  
**Ziaimehr****(10) Patent No.: US 7,976,572 B2**  
**(45) Date of Patent: Jul. 12, 2011****(54) FORCED AIR WARMING UNIT****(75) Inventor: Allen Hamid Ziaimehr**, Arden Hills,  
MN (US)**(73) Assignee: Arizant Healthcare Inc.**, Eden Prairie,  
MN (US)**(\*) Notice:** Subject to any disclaimer, the term of this  
patent is extended or adjusted under 35  
U.S.C. 154(b) by 1168 days.**(21) Appl. No.: 11/704,547****(22) Filed: Feb. 9, 2007****(65) Prior Publication Data**

US 2008/0195184 A1 Aug. 14, 2008

**(51) Int. Cl.**  
**A61F 7/12** (2006.01)  
**A61F 7/00** (2006.01)**(52) U.S. Cl.** ..... 607/96; 607/108; 607/104**(58) Field of Classification Search** ..... 607/96-114;  
219/212, 222-226; 34/96-100  
See application file for complete search history.**(56) References Cited****U.S. PATENT DOCUMENTS**

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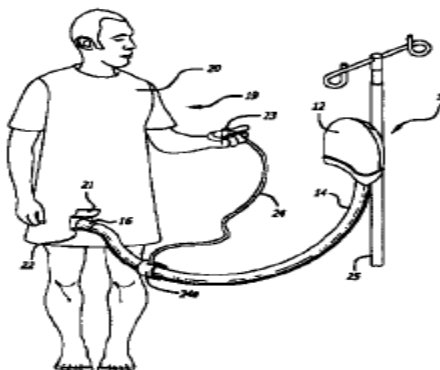
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**Primary Examiner** — Thomas J Sweet**Assistant Examiner** — Ryan Henderson**(74) Attorney, Agent, or Firm** — Terrance A. Meador;  
INCAPI,AW**(57) ABSTRACT**Both the flow rate and the temperature of the air exiting a  
forced air warming unit are regulated in response to a single  
act or operation of a single element of control on a manually-  
operated remote control.**7 Claims, 10 Drawing Sheets**



## [54] DEVICE FOR SELF-DEFENSE TRAINING

[76] Inventor: Robert Archer Schemmel, 18012  
Hiawatha St., Northridge, Calif.  
91324

[21] Appl. No.: 707,361

[22] Filed: Jul. 21, 1976

[51] Int. Cl.<sup>2</sup> ..... A63B 69/00

[52] U.S. Cl. .... 272/76

[58] Field of Search ..... 272/76, 77, 78, 98;  
273/55 R, 55 A, 1 F

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Primary Examiner—William H. Grieb

Assistant Examiner—T. Brown

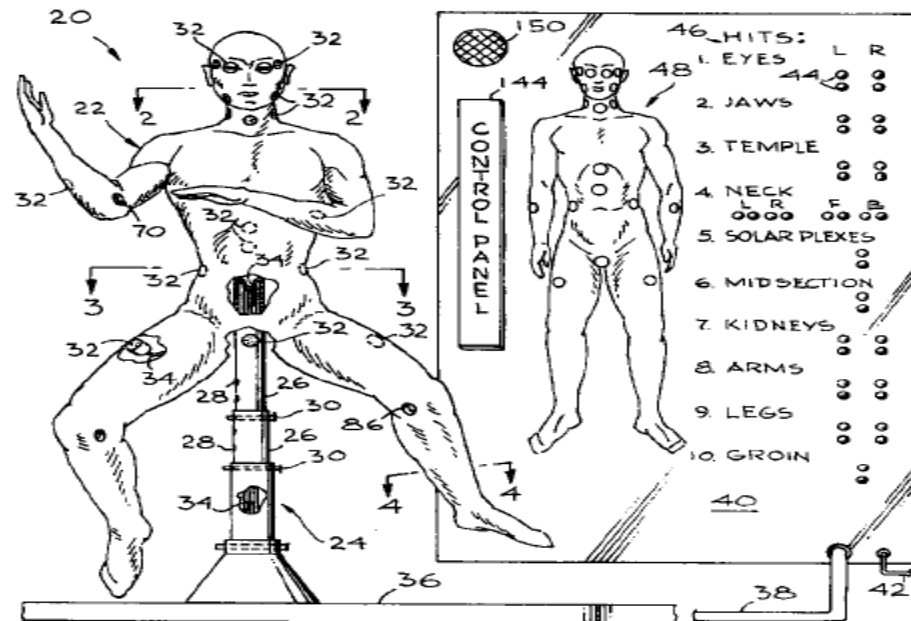
Attorney, Agent, or Firm—John J. Posta, Jr.

## [57]

## ABSTRACT

An improved device for use in self defense training, as in karate and the like, includes a life-like articulated training dummy supported in an upright position on a post and having a plurality of separate pressure receptors disposed at various target locations in the dummy. The receptors are interconnected to a signal such as individual lights in a remote display panel so that hits on the receptors can be separately displayed by the panel. The panel can include a timer, hit sequence counter, hit sequence programmer, printed readout, and hit sequence replayer, as well as a warning signal, visual and/or audible, and other safety and training aids. The receptors can be made to distinguish between light and heavy blows. The support post can be rotated at high speed to cause the dummy to simulate an attack when activated by weight detectors in a base around the post. The weight detectors are also disposable in the base in a mode to facilitate stance training. The dummy and post can be provided with shock absorbing elements to protect them from heavy hits during practice. Preferably the dummy includes a tough, resilient surface layer for further protection of the dummy and trainee (one using the dummy) and for toughening the hands of the trainee. The device provides unique advantages in the art of self defense training.

29 Claims, 14 Drawing Figures





US006565518B2

**(12) United States Patent**  
**Blazey et al.****(10) Patent No.: US 6,565,518 B2**  
**(45) Date of Patent: May 20, 2003****(54) TECHNIQUE FOR DIAGNOSING  
ATTENTION DEFICIT HYPERACTIVITY  
DISORDER****(75) Inventors:** Richard N. Blazey, Penfield, NY (US);  
Peter A. Parks, Topeka, KS (US);  
David L. Patton, Webster, NY (US);  
Paige Miller, Rochester, NY (US)**(73) Assignee:** Eastman Kodak Company, Rochester,  
NY (US)**(\*) Notice:** Subject to any disclaimer, the term of this  
patent is extended or adjusted under 35  
U.S.C. 154(b) by 20 days.**(21) Appl. No.:** 09/865,902**(22) Filed:** May 25, 2001**(65) Prior Publication Data**

US 2003/0028121 A1 Feb. 6, 2003

**(51) Int. Cl.:** A61B 5/00**(52) U.S. Cl.:** 600/549; 600/544; 600/546**(58) Field of Search:** 600/26-28, 300,  
600/549, 558, 544, 546, 481, 500, 509;  
128/897, 898**(56) References Cited****U.S. PATENT DOCUMENTS**

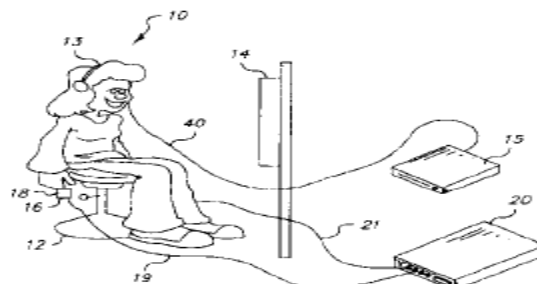
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**Primary Examiner**—Max F. Hindenburg**Assistant Examiner**—Charles Marmor, II**(74) Attorney, Agent, or Firm**—William F. Noval**(57) ABSTRACT**

A method for determining a threshold value of a parameter used to determine whether an individual has Attention Deficit Hyperactivity Disorder (ADHD). The method includes: providing a group of individuals a segment of which is known to have ADHD and a segment of which is known to be normal and not have ADHD; testing each individual in the group by sampling the peripheral skin temperature of the individual during a pre-determined time interval when the individual is in an inactive state to provide sampled peripheral skin temperature data, and analyzing the sampled peripheral skin data to produce a parameter value for that individual. The method further includes: processing the individual parameter values for all of the members of the group to determine a threshold parameter value which is acceptable for determining whether or not an individual has ADHD when tested by the testing procedure.

**29 Claims, 4 Drawing Sheets**

# United States Patent [19]

Bryan

[11] Patent Number: 4,778,172

[45] Date of Patent: Oct. 18, 1988

## [54] ANIMAL HEAD

[76] Inventor: William C. Bryan, 23139 Schumann Rd., Chatsworth, Calif. 91311

[21] Appl. No.: 72,971

[22] Filed: Jul. 14, 1987

[51] Int. Cl.<sup>4</sup> ..... A63J 3/00; A63H 3/36

[52] U.S. Cl. .... 272/8 N; 446/26; 446/395

[58] Field of Search ..... 446/304, 369, 372, 371, 446/395, 391, 268, 26, 368, 901; 272/8 N, 8 R

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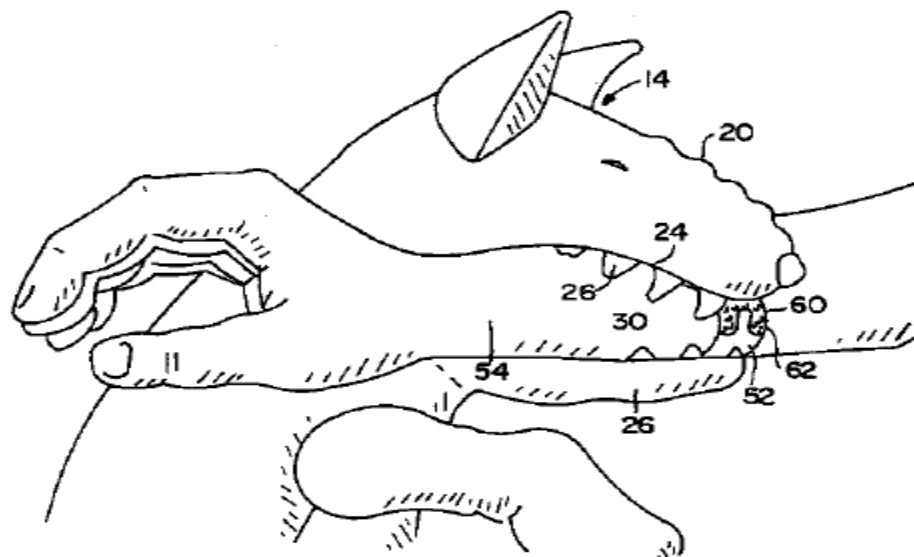
Primary Examiner—Mickey Yu

Attorney, Agent, or Firm—Bogucki, Scherlacher, Mok & Roth

## [57] ABSTRACT

An animal head suitable for attachment to a stuffed animal body is molded to form a thin shell and then filled with conforming foam rubber. The head defines open jaws that can fit around a wrist of a person and an elongated tongue that can be wrapped around the wrist and secured between the upper and lower jaws to serve as a carrying handle. By making the tongue flesh tone in color and providing a red coloration on a visible portion of the tongue, a novelty effect simulating blood dripping from a bite is achieved.

9 Claims, 2 Drawing Sheets





US006920646B2

**(12) United States Patent**  
**Crye et al.****(10) Patent No.: US 6,920,646 B2**  
**(45) Date of Patent: Jul. 26, 2005****(54) HUMAN WASTE MANAGEMENT SUIT****(75) Inventors:** Caleb Clark Crye, Brooklyn, NY (US); Gregg M. Thompson, Brooklyn, NY (US); Eric Owen Fehlberg, Queens, NY (US)**(73) Assignee:** LineWeight LLC, Brooklyn, NY (US)**(\*) Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 121 days.**(21) Appl. No.:** 10/601,322**(22) Filed:** Jun. 21, 2003**(65) Prior Publication Data**

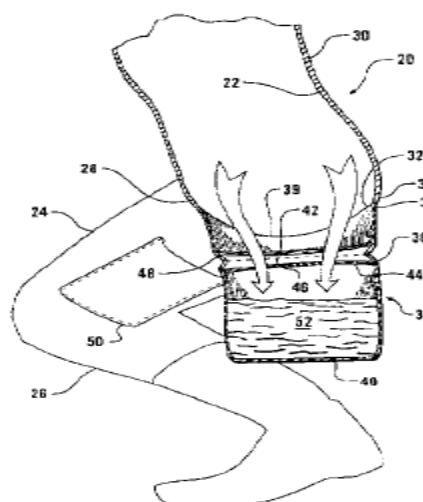
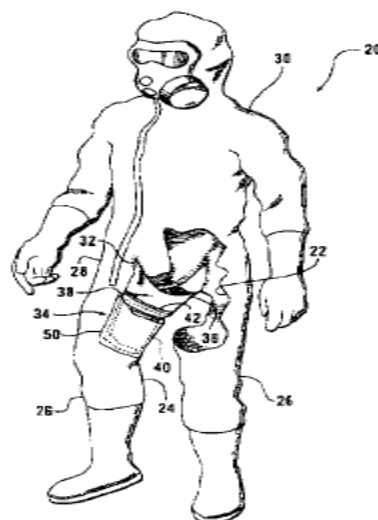
US 2005/0076423 A1 Apr. 14, 2005

**(51) Int. Cl.<sup>7</sup>** ..... A62B 17/00**(52) U.S. Cl.** ..... 2/457; 604/348**(58) Field of Search** ..... 2/456, 457, 458, 2/901, 2.11, 2.14, 2.15; 604/327, 348**(56) References Cited****U.S. PATENT DOCUMENTS**3,034,131 A \* 5/1962 Constantin ..... 2/214  
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*Primary Examiner—Rodney M. Lindsey**(74) Attorney, Agent, or Firm—Stiennon & Stiennon***(57) ABSTRACT**

A chemical/biological hazard protection suit has two pants legs which extend to a midsection below waist level. An opening in the midsection defines an outlet from the suit interior. A waste collector has an upper segment which is fixed to the midsection and which adjoins an intermediate segment which is in turn connected to a waste receptacle. A first seal is between the upper segment and the intermediate segment, and a second seal is between the intermediate segment and the waste receptacle. A region of weakened material encircles the intermediate segment between the seals. A wearer discharges waste through the outlet and past the two open seals into the receptacle, whereupon both seals are closed, and the receptacle is detached from the upper segment, leaving both the receptacle and the suit sealed. Prior to use, the waste receptacle may be retained within a pocket on one of the pants legs.

**13 Claims, 4 Drawing Sheets**



US006832983B2

(12) **United States Patent**  
**Goodman**

(10) **Patent No.:** **US 6,832,983 B2**  
(45) **Date of Patent:** **Dec. 21, 2004**

(54) **ARTICLE OF CLOTHING WITH A NOVEL ATTACHMENT MEANS**

(76) **Inventor:** **John Mott Goodman**, 9472 Central Ave., Garden Grove, CA (US) 92844-1505

(\*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 128 days.

(21) **Appl. No.:** **10/113,522**

(22) **Filed:** **Apr. 1, 2002**

(65) **Prior Publication Data**

US 2003/0187323 A1 Oct. 2, 2003

(51) **Int. Cl.<sup>7</sup>** ..... **A61F 5/00**

(52) **U.S. Cl.** ..... **600/38; 2/67; 2/69; 2/300**

(58) **Field of Search** ..... **600/38-41; 128/846, 128/885, 886; 2/4, 67, 69, 78.1, 1, 455, 456, 406, 309, 247**

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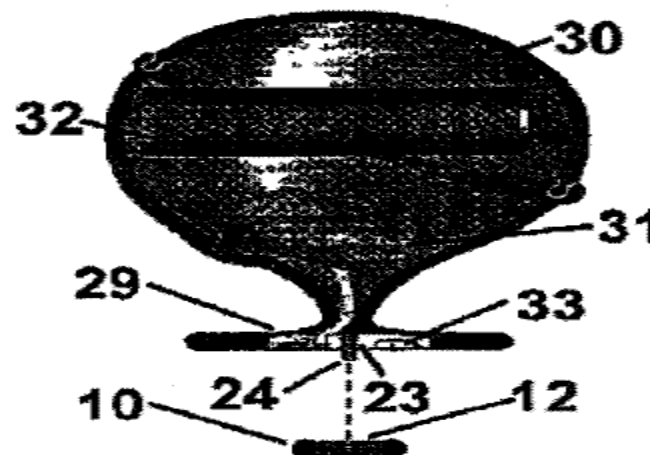
WO 96/26700 A 9/1996

*Primary Examiner*—John P. Lacyk

(57) **ABSTRACT**

An article of clothing including extensions for insertion into a body cavity permit swimsuits, undergarments, and several other types of clothing to be secured in place with a minimum of fabric, as described. The articles are made dimensionally stable to maintain their position and orientation relative to the wearer's body.

**3 Claims, 7 Drawing Sheets**



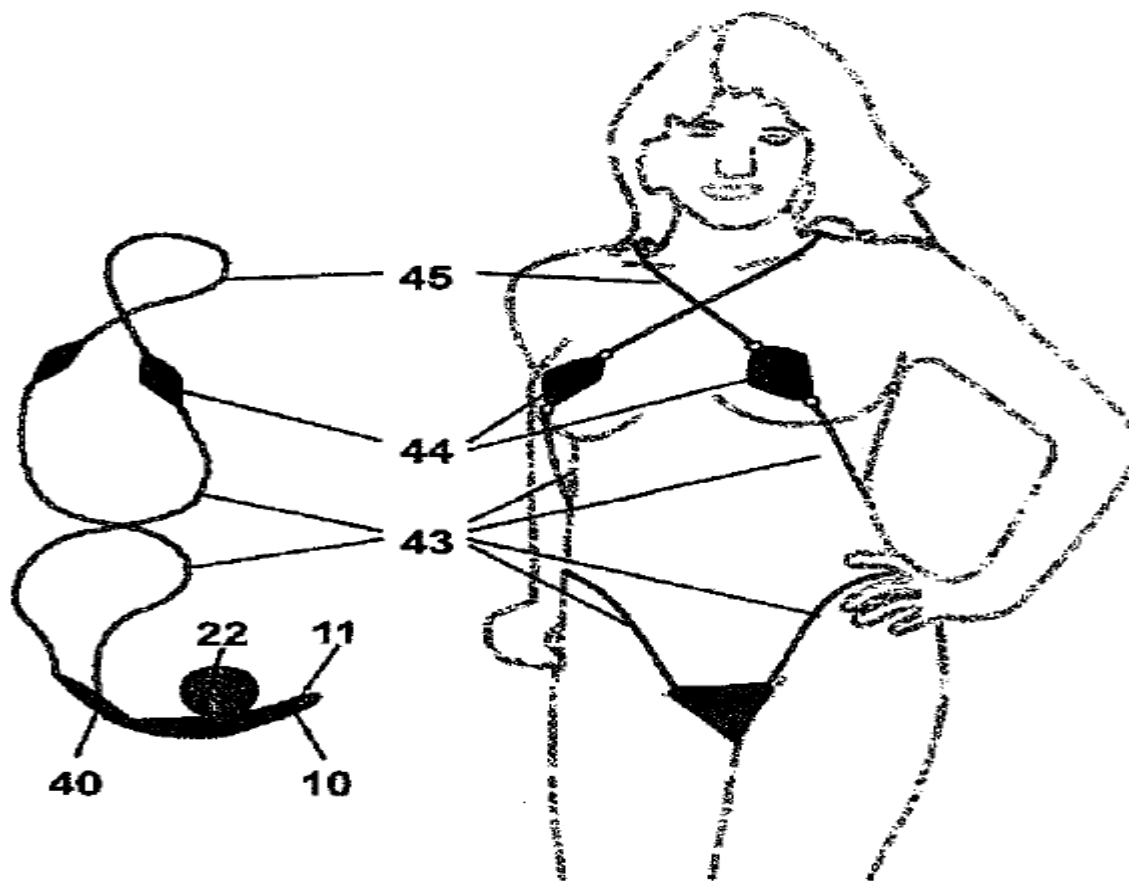
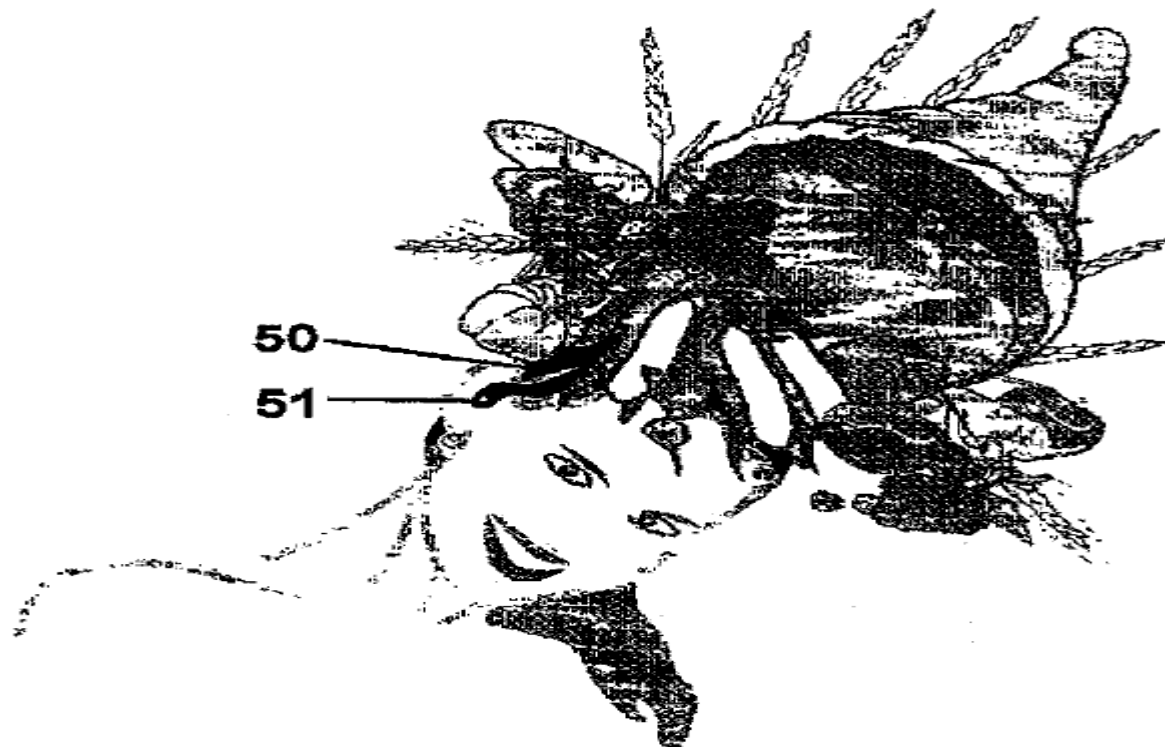
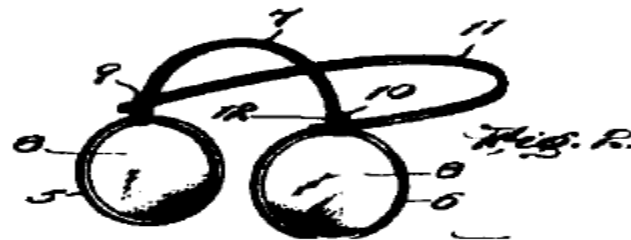


Figure 7



**Figure 8**



James H. Jones

Spectacles to be worn by hens in order to prevent their eyes from being injured by the beaks of other birds: Patented December 10, 1902



# Treaties and Foreign Patents

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- Information presented here applies to U.S. laws and regulations.
- Inventor must apply for patent protection in each foreign country.
- Paris Convention for the Protection of Industrial Property
  - Includes 176 contracting parties (countries), including the U.S. (WIPO information)
  - Provides across-the-board patent and trademark rights as each country gives its own citizens.

# Treaties and Foreign Patents

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- Patent Cooperation Treaty

- Includes 148 contracting states (countries), including the U.S. (WIPO information)
- Facilitates patent application filing with centralized filing procedures and standardized format.

# America Invents Act (AIA)

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- Leahy-Smith America Invents Act signed by the President on Sept. 16, 2011 and enacted in phases, with final phase enacted on March 16, 2013.
- U.S. has transitioned from a first to invent (date of conception) patent system to a system where priority is given to the first inventor to file a patent application, which follows most of the rest of the world.
- Expanded Prior Art: On-sale, used in public, published and patented.  
Newly added: “or otherwise available to the public.”

# America Invents Act (AIA)

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- One-year grace period given to inventor only for his or her own publications. Publications by others during grace period are prior art to inventor's application if filed later. But the grace period extends to inventor for publications by others if publication is derived from inventor's invention (burden of proof is on inventor).
- Now it is more important to submit disclosures quickly so that patent applications can be filed after due diligence research and before public disclosure, or as soon after public disclosure or publication as possible.

# America Invents Act (AIA)

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- Publication can include enabling dissertations, public descriptions or abstracts, posters, or white papers published online, for example.
- Universities must be strategic and diligent since filing too early may result in unnecessary multiple filings and costs.
- AIA brought other changes to U.S. patent law, but those are for another presentation.

# APPEALS

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Rejections/objections can be appealed to:

- Commissioner of Patents or Board of Patent Appeals and Interferences.
  - Rejections are based on statute and appealable to the Board, not the Commissioner.
  - Objections, depending on their basis, are appealable to the Commissioner or Board.
- May alternatively re-file the application as a continuation application that includes changes or amendments.
  - May file a Request for Continued Examination.

# APPEALS

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- May appeal Board decision to either U.S. District Court for the District of Columbia or U.S. Court of Appeals for the Federal Circuit.
  - May appeal from U.S. District Court (D.C.) to Federal Circuit.
- May appeal Commission decision to a U.S. District Court.
  - May appeal from U.S. District Court to Federal Circuit.
- May appeal Federal Circuit decision to U.S. Supreme Court.

# University IP Disclosures

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- Proper disclosures to the JSU OTD are critical and provide a fixed record of invention conception and description or creative expression concerning all IP.
- Date of conception of an invention should still be maintained and preserved, even under the AIA's first inventor to file rule.
- Inventors should keep a record of all inventive activity, such as a witnessed, bound, page-numbered and dated manual or electronic notebook or notarized records as evidence of conception and development of an invention to verify proof of invention.
- Authors likewise should document all creative expression and author lists.



# Invention Development Organizations

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- Private consulting and marketing groups.
- Assist inventors with patenting process and marketing of patents.
- Some are legitimate, while others are not.

# Inventorship

- The inventor in patent law is the person or persons who conceived the patented invention and reduced it to practice.
- Conception:
  - Exists when a definite and permanent idea of an operative invention, including every feature of the subject matter claimed, is known and able to be applied in practice (statutory and case law).
  - Complete when one of ordinary skill in the art could construct the system or perform the process without extensive research or experimentation.
  - Requires contemporaneous recognition and appreciation of the limitations of the claimed invention.

# Inventorship

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- Actual reduction to practice:
  - Involves the invention's being constructed and sufficiently tested to prove its usefulness for the intended purpose.
  
- Constructive reduction to practice:
  - Involves the filing of an application for a patent directed to the invention.
  - Filing has the legal effect of being, constructively, a simultaneous conception and reduction to practice of the invention.

# Inventorship

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- Inventor need not provide evidence of either conception or actual reduction to practice when relying only on the content of the application.
- No requirement exists that the invention be actually constructed, or actually reduced to practice, before being patented.
  - EXAMPLE: In 1888, the U.S. Supreme Court upheld a patent issued to Alexander Graham Bell even though he had filed his application before constructing a working telephone: “It is enough if [an inventor] describes his method with sufficient clearness and precision to enable those skilled in the matter to understand what the process is, and if he points out some practicable way of putting it into operation.”

# Inventorship

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- For the application to constructively reduce the invention to practice, it must teach one of ordinary skill in the art how to make and use the invention.
- No specific requirement exists that the inventor be the person to constructively reduce the invention to practice, so that the filing of the application by another on behalf of the inventor is sufficient for constructive reduction to practice of the invention.

# Inventorship

## One is not an inventor for:

- Suggesting a desired end or result, without any specific means of accomplishing that result.
  - Someone suggesting to the Wright Brothers that motorized flight would be desirable, but not describing a way of accomplishing it, would not have made that person an inventor.
- Merely following the instructions of others or for performing routine acts.
- Merely identifying a problem, unless he or she also contributes to the solution of the discovered problem.

# Inventorship

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- The exercise of ordinary skill by a person in developing something is generally not sufficient to make that person an inventor.
  - A person who exercises ordinary skill in implementing the instructions of another is typically not considered a joint inventor.
  - But one may be an inventor even if he/she does not personally undertake all steps necessary to complete the invention.

# Inventorship

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- One who merely explains the state of the art to the true inventors or supplies a product for use in the invention, without an inventive act, is generally not an inventor.



# Inventorship

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- An inventor must contribute to a definite and permanent idea of the complete and operative invention.
  - An idea is definite and permanent when the invention has a permanent solution to the problem, not just a general goal or research plan to pursue.

# Inventorship

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- An inventor need not know the invention will work for conception to be complete:
  - He or she need only show the idea was complete.
  - The discovery that an invention actually works relates to its reduction to practice, not to conception.
  - But, conception is not complete if subsequent testing shows uncertainty of the idea, showing that it is not yet a definite and permanent reflection of the complete invention.

# Inventorship

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- Merely confirming the invention works for its intended purpose is general not enough to elevate a person to the status of inventor, who must participate in the formation of the basic concepts of the invention.



# Joint Inventorship

# Joint Inventorship

## ■ Basic Requirements

- When two or more individuals collaborate and each contributes to the formation or conception of the solution to a problem that comprises the invention.
- The claims of a patent are the standard for determining inventorship, whether it be an individual or a group.
  - All inventorship questions should be analyzed against the specific steps that make the invention different from any prior art.
  - A sole inventor must have conceived the ideas in all the patent's claims.
  - A co-inventor must have conceived the idea in at least 1 of the patent's claims.

# Joint Inventorship

- Joint Inventors:
  - Do not have to physically work together or at the same time.
  - Do not have to make the same type or amount of contribution.
  - Do not have to make a contribution to the subject matter of every claim.  
(A material contribution to one claim is enough.)
- A co-inventor must be able to say that without the contribution to the final conception, the invention would have been less efficient, less simple or complex, less economical, and/or less something beneficial.

# Joint Inventorship

To help determine inventorship:

Ask of a potential co-inventor's contribution:

“If this idea had not been contributed, would that claim (or the claimed invention) exist?”

- If the answer is NO, then that person is probably a co-inventor.

Co-workers can be divided into 3 groups:

1. Those who contribute ideas that result in development of an invention as claimed = co-inventors.
2. Those who contribute only labor, supervision, routine techniques, non-mental contributions = NOT co-inventors.
3. Those who contribute ideas while invention is developed, whose ideas don't contribute directly or materially to claims = NOT co-inventors.

# Joint Inventorship

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- No explicit lower limit exists on the amount or quality of contribution – each case is fact-specific as to the collaboration between two or more persons working together.
- Joint inventor must contribute in some significant manner to the conception of the invention, so that the contribution is significant in quality when measured against the entire invention.
- If one supplies sufficient inventive contribution, he/she does not lose co-inventor status simply because he/she used services, ideas, or help of others in perfecting the invention (but those others may become joint inventors based on their contributions).



# Joint Inventorship

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- Therefore, one of ordinary skill in the art who simply reduced the inventor's idea to practice is not necessarily a joint inventor.
- Adding any individual as an inventor to a patent application as a courtesy, when he/she are in fact not a co-inventor, may invalidate any patent that may ultimately be issued.

# Invention Ownership

- Inventor generally owns patent rights to the invention, even if the invention was invented during the course of employment, except:
  - An employer owns an employee's inventions if the employee is a party to a contract to that effect, or
  - When an employee is specifically hired to invent something or to solve a problem or to conduct predetermined experiments ("employed-to-invent exception").
- If an employee uses the time or facilities of the employer, the employer may have a non-exclusive and non-transferable royalty-free license to use the employee's patented invention (shop right).

# Invention Ownership

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- U.S. Patent law allows an inventor to transfer patent rights to another.
  - Inventors may assign their presumed right in the invention to others.
  - Universities typically require that employee inventors, by policy and/or contract, assign patent rights to the university for inventions devised pursuant to grants for such purposes to the university.

# Patents

## ■ Top 10 Most U.S. Patents Issued in 2014 (24/7 Wall St.)

1.	IBM	7,534
2.	Samsung	4,952
3.	Canon	4,055
4.	Sony	3,224
5.	Microsoft	2,829
6.	Toshiba	2,608
7.	Qualcomm	2,590
8.	Google	2,566
9.	L G Electronics	2,122
10.	Panasonic	2,095

# PRIOR DISCLOSURES (U.S.)

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- Involves patent law statutory bars.
- Patent is barred if, more than 1 year before filing an application, the following occurs:
  - Invention is patented or described in a printed publication anywhere in the world.
  - Invention is in public use in the U.S.
  - Invention is on sale in the U.S.
- AIA somewhat modified what constitutes prior art, as discussed.

# Patented or Described in a Printed Publication

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- Printed description is released to the public anywhere in the world.
  - Must completely disclose the invention.
- “Printed” is broad – paper documents, microfilm, electronic media.

# Patented or Described in a Printed Publication

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## ■ “Publication”

- Means that the printed document is freely available to the public, even if no one has ever read or seen it.
- Single copy of a document distributed without restriction qualifies.
- Documents under non-disclosure or confidentiality agreements are not publicly available and generally do not trigger the bar.

# Patented or Described in a Printed Publication

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- Documents or posters distributed or shown at tradeshow, documents presented at conferences, or documents posted on Internet websites can trigger the bar.
- Single copy of a document, i.e. university thesis, stored in a publicly-accessible place (library) anywhere can trigger the bar.
- White papers, printed copies or slide show presentations, marketing materials presented to potential investors can also trigger the bar.
- Draft technical journals published on the Internet for comment can trigger the bar.



# Patented or Described in a Printed Publication

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- Publication must be public
  - Indexing or cataloguing a document in a library or web index that is “findable” by the public may be considered public disclosure.

# In Public Use in the U.S.

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- A “totality of the circumstances” test determines if an activity is “public use”:
  - generally any non-secret use
  - may be a single use of an invention by anyone without duty of secrecy
  - a use or sale of a product made by a secret process is public use of the process

# In Public Use in the U.S.

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- new product display or plans to make it presented at tradeshow or professional meeting
- using software to support a website
- may be public use even if one cannot see it (1880's use of a new corset was a patent-barring public use)

# In Public Use in the U.S.

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- secret process or machine hidden in a business making a commercial product may be a public use of the process or machine
- beta test of new technology with a potential customer could be public if not handled properly
- showing the functionality of an invention to a friend

# In Public Use in the U.S.

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- Experimental use generally does not trigger the bar, if for testing or research on a claimed feature of the invention.
- Inventor should make sure that:
  - he/she controls the testing
  - detailed records and progress reports of tests and results are kept
  - confidentiality agreement(s) are in place
  - duration and number of tests compare with tests on other similar inventions (reasonable protocol)
  - tests are confidential

# In Public Use in the U.S.

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- Immaterial that public use was by a third party without knowledge or consent of inventor.
- All that's necessary is exposure to anyone other than:
  - (1) the inventor, or
  - (2) someone under a non-disclosure agreement.

# On Sale in the U.S.

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- On sale when it is subject to a commercial sale or offer for sale and ready for patenting.
  - Ready for patenting means reduced to practice or if inventor has drawings or description sufficient to enable one of ordinary skill in the art to practice the invention.
  - So, if an invention is being developed or has some “kinks” to work out, it is not likely ready for patenting and not capable of triggering the on-sale bar.

# On Sale in the U.S.

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- Unlike “printed publication” and “public use” statutory bars, the on-sale bar has no “public” component, so that such a sale or offer triggers the bar even if conducted privately, secretly, and not publicly.
- General contract principles under the UCC may determine if an offer and acceptance qualifies as a commercial offer for sale.
- A single offer is sufficient, even if not accepted.



# PRIOR DISCLOSURES INTERNATIONAL

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- Some countries have an “absolute novelty” rule: application must be filed before any enabling disclosure.
- Most foreign countries do not provide a 1-year grace period so that an application must be filed before any public enabling disclosure.
- Should file a U.S. patent application first before any disclosure that might trigger a statutory bar.
- Can then rely on the U.S. filing date as long as foreign application or PCT is filed within 1 year of U.S. application filing date (1 year dates from provisional if that was filed).
- Best to file application before any public disclosure, use, or offer to sell an invention.

# PUBLIC DISCLOSURE

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■ Public disclosure can be written, oral, or electronic and may depend on who's present and the existence of notice of confidentiality:

- Book publications, tech journal articles, dissertations, posters, slides, lectures, seminars, letters, public conversations, grant proposals; providing information to others by email without notice of confidentiality.

# PUBLIC DISCLOSURE

- Is it “enabling”? i.e., does it allow or teach one of ordinary skill in the art to make and use the invention?
- Is it “sufficiently accessible”?
- If prior to filing an application, the invention is to be disclosed to a 3<sup>rd</sup> party, depending on the situation make sure:
  - If for further testing, take steps for proof.
  - Confidentiality agreement is in place.
  - It is not enabling.
- Inventor should record the date(s) of any disclosure and/or make university tech transfer office aware of such beforehand, if possible.

# PUBLIC DISCLOSURE

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- Grant proposals are not public until available to the public for review.
  - Mark all pages and legend “Confidential”, include a notice of its exemption from disclosure under Freedom of Information Act, and include a notice that any release must be approved by the principal investigator.
- Disclose all possible inventions to university tech transfer office when submitting a paper for publication or preparing to present a seminar to protect all national and international patent rights to the technology.

# IMPROVEMENT PATENTS

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- Involve inventions that improve on or add to existing inventions.
- Protect the differences between a new product and previously existing product.
- Can involve a new technology built into an old product: Ex: digital replaces analog control
- Can involve a new use of an existing invention: new use of a product or composition normally used for other purposes.

# IMPROVEMENT PATENTS

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- Patentability involves distinctions with existing inventions and determination of novelty, usefulness, and non-obviousness of the improvement.
  - If same inventive entity of existing invention files application for improvement within 1 year of issuance of existing invention, existing invention is not prior art.
  - If after 1 year, regardless of inventorship, existing invention will likely be prior art in evaluating patentability.

# IMPROVEMENT PATENTS

- Practicing the improvement may infringe the existing patent (depends on inventive entity and licensure).
- For a pending application, improvements can be protected by filing continuation-in-part applications.
  - Continuation application:
    - (1) claims same invention as previous application, but contains some variation in scope of subject matter claimed (no new disclosure information allowed).
    - (2) continues prosecution of earlier application that can't be completed due to USPTO administrative rules.

# IMPROVEMENT PATENTS

- CIP: contains all or part of disclosure of previous application and additional subject matter in the disclosure (new matter) for added improvements, which have priority as of filing the CIP if not supported in earlier specification.
- Divisional:
  - (1) claims an invention independent from that in previous pending application but based on same subject matter as earlier application.
  - (2) may result from earlier application's restriction into subsets of original claims.



# OTHER TIPS

- Keep an inventor's notebook.
  - Preserves date of conception and reduction to practice
  - Assists determining inventorship (if at issue)
- For trade journal articles, news releases, symposia presentations, research proposals for grant applications and funding solicitations, and the like, if possible preserve confidentiality:
  - Don't make it enabling: omit or limit, if possible, critical details.
  - Limit disclosure to results achieved without describing the means by which results were achieved.

# OTHER TIPS

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Remember:

- U.S. provides 1-year grace period for filing patent application after disclosure, but many foreign countries do not.
  - Foreign patent applications and PCT applications must be filed before any publicly enabling disclosure is made.
  - Applicant can rely on a U.S. filing as long as foreign filing is within 1 year of U.S. filing.

# Trademarks and Service Marks

TM SM



- Registration is through the U.S. Patent and Trademark Office (federal) and/or Secretary of State offices (state).
- A trademark is a word, picture, phrase, symbol, design, or combinations that identifies and distinguishes the source of a product or service of one party from those products or services of others.
- Rights can last indefinitely if owner continues use and files periodic renewal documents.



<b>Word Mark</b>	<b>JACKSON STATE UNIVERSITY 18 77 MISSISSIPPI EXCELLENTIA ACADEMICA INVESTIGATIO ET OFFIRIUM</b>
<b>Translations</b>	The English translation of "EXCELLENTIA ACADEMICA" in the mark is as follows - "Academic Excellence Research and Services".
<b>Goods and Services</b>	IC 014. US 002 027 028 050. G & S: clocks and watches. FIRST USE: 19841103. FIRST USE IN COMMERCE: 19841103  IC 016. US 002 005 022 023 029 037 038 050. G & S: notebooks. FIRST USE: 19841103. FIRST USE IN COMMERCE: 19841103  (CANCELLED) IC 018. US 001 002 003 022 041. G & S: umbrellas. FIRST USE: 19841103. FIRST USE IN COMMERCE: 19841103  IC 021. US 002 013 023 029 030 033 040 050. G & S: drinking glasses, plates, cups and mugs. FIRST USE: 19841103. FIRST USE IN COMMERCE: 19841103  (CANCELLED) IC 025. US 022 039. G & S: [ clothing, namely, T-shirts, jerseys, caps, shorts, jackets, sweatshirts, sweaters, pants, shirts and coats ]. FIRST USE: 19841103. FIRST USE IN COMMERCE: 19841103  (CANCELLED) IC 028. US 022 023 038 050. G & S: golf balls. FIRST USE: 19841103. FIRST USE IN COMMERCE: 19841103  IC 041. US 100 101 107. G & S: educational services, namely, providing courses of instruction at the College and post-graduate level. FIRST USE: 19841103. FIRST USE IN COMMERCE: 19841103
<b>Mark Drawing Code</b>	(3) DESIGN PLUS WORDS, LETTERS, AND/OR NUMBERS



<b>Word Mark</b>	JSU
<b>Goods and Services</b>	IC 021. US 002 013 023 029 030 033 040 050. G & S: Mugs, works of art made of porcelain and waste baskets. FIRST USE: 20091014. FIRST USE IN COMMERCE: 20091014
<b>Mark Drawing Code</b>	(3) DESIGN PLUS WORDS, LETTERS, AND/OR NUMBERS
<b>Design Search Code</b>	03.01.03 - Cats, tigers or other large cats; Cheetahs; Jaguars; Leopard; Lynx; Ocelots; Panther; Panthers; Puma; Tigers
<b>Trademark Search Facility Classification Code</b>	ANI-MAMM Mammalia; accurate depiction of warm-blooded animals except for human beings LETTER-3-OR-MORE JSU Combination of three or more letters as part of the mark
<b>Serial Number</b>	76700650
<b>Filing Date</b>	December 3, 2009
<b>Current Basis</b>	1A
<b>Original Filing Basis</b>	1B
<b>Published for Opposition</b>	March 16, 2010
<b>Registration Number</b>	3914606
<b>Registration Date</b>	February 1, 2011
<b>Owner</b>	(REGISTRANT) Jackson State University INSTITUTION OF HIGHER LEARNING - UNIVERSITY MISSISSIPPI 1400 John R. Lynch Street Jackson MISSISSIPPI 39217



<b>Word Mark</b>	JSU
<b>Goods and Services</b>	<p>IC 009. US 021 023 026 036 038. G &amp; S: Football helmets. FIRST USE: 19780701. FIRST USE IN COMMERCE: 19780701</p> <p>IC 014. US 002 027 028 050. G &amp; S: Jewelry. FIRST USE: 19780701. FIRST USE IN COMMERCE: 19780701</p> <p>IC 018. US 001 002 003 022 041. G &amp; S: Back pack. FIRST USE: 19780701. FIRST USE IN COMMERCE: 19780701</p> <p>IC 020. US 002 013 022 025 032 050. G &amp; S: Stadium cushions. FIRST USE: 19780701. FIRST USE IN COMMERCE: 19780701</p> <p>IC 024. US 042 050. G &amp; S: Cloth banners and cloth flags. FIRST USE: 19780701. FIRST USE IN COMMERCE: 19780701</p> <p>IC 025. US 022 039. G &amp; S: Jerseys; t-shirts; caps. FIRST USE: 19780701. FIRST USE IN COMMERCE: 19780701</p> <p>IC 030. US 046. G &amp; S: Cooking seasonings. FIRST USE: 19780701. FIRST USE IN COMMERCE: 19780701</p>
<b>Mark Drawing Code</b>	(3) DESIGN PLUS WORDS, LETTERS, AND/OR NUMBERS
<b>Design Search Code</b>	<p>26.11.14 - Rectangles (three or more rectangles); Three or more rectangles</p> <p>26.11.21 - Rectangles that are completely or partially shaded</p>
<b>Trademark Search Facility</b>	<p>LETTER-3-OR-MORE JSU Combination of three or more letters as part of the mark</p> <p>SHAPES-BAR-BANDS Designs with bar, bands or lines</p>

# THE SONIC BOOM OF THE SOUTH

<b>Word Mark</b>	THE SONIC BOOM OF THE SOUTH
<b>Goods and Services</b>	IC 025. US 022 039. G & S: t-shirts. FIRST USE: 19710701. FIRST USE IN COMMERCE: 19710701 IC 041. US 100 101 107. G & S: entertainment, namely, live performances by a musical band. FIRST USE: 19710701. FIRST USE IN COMMERCE: 19710701
<b>Standard Characters Claimed</b>	
<b>Mark Drawing Code</b>	(4) STANDARD CHARACTER MARK
<b>Serial Number</b>	76699456
<b>Filing Date</b>	September 14, 2009
<b>Current Basis</b>	1A
<b>Original Filing Basis</b>	1A
<b>Published for Opposition</b>	March 2, 2010
<b>Registration Number</b>	3789041
<b>Registration Date</b>	May 18, 2010
<b>Owner</b>	(REGISTRANT) Jackson State University INSTITUTION OF HIGHER LEARNING (UNIVERSITY) MISSISSIPPI 1400 John R. Lynch Street Jackson MISSISSIPPI 39217
<b>Attorney of Record</b>	W. Whitaker Rayner
<b>Type of Mark</b>	TRADEMARK. SERVICE MARK
<b>Register</b>	PRINCIPAL
<b>Live/Dead Indicator</b>	LIVE

# Trademarks and Service Marks

- A service mark is a mark that identifies and distinguishes the source of a service rather than a product.
  - Ex: JSU trademarks exist for stickers, t-shirts, and drinking mugs
  - Ex: JSU service mark exists for educational services of providing instruction courses and entertainment services
- Registration is not required (state or federal)
  - Rights are established on legitimate use of the mark.
  - Should use “TM” or “SM” next to mark to visually indicate claim of ownership.



# Trademarks and Service Marks

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- Registration does provide:
  - Constructive notice of owner's claim of ownership
  - Evidence of ownership
  - Ability to file an injunctive or infringement action in federal court
  - Ability to file for registration in foreign countries
  - Ability to file for registration with U.S. Customs Service to prevent importation of infringing foreign goods

# Trademarks and Service Marks

- May use “TM” or “SM” designation with the mark any time owner claims rights in a mark to place public on notice of claim of ownership.
- May use “®” ONLY after the federal USPTO registers the mark, NOT while application is still pending or if only registered through a state’s SOS office.
- Notice is used to ideally prevent others from using a confusingly similar mark.
  - Cannot prevent others from making, selling, or providing the same types of products or services under a clearly different mark.
  - Others may also use a similar mark if in a completely different classification and if no public confusion would exist.

# Trademarks and Service Marks

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- Basic fees (federal and state) per mark for each category (classification) of products or services, depending on the application.
- Can be obtained for:
  - Use in commerce
  - Intent to use in commerce
- Prior mark search should be completed initially.

# Trademarks and Service Marks

- Levels of mark strength (from strongest to weakest):
  - Fanciful – Invented or made up, Ex: “Kodak”
  - Arbitrary – Commonly used but no meaning as to the goods, Ex: “Arrowhead” water
  - Suggestive – Some sort of quality or characteristic, Ex: “Coppertone” sun lotion
  - Descriptive – Describes goods or services, Ex: “Bob’s 10 Minute Lube”
    - Surnames – Like descriptive marks, but can become stronger through use, Ex: “Smith Shoes”
  - Generic – No protection or registration since it is used for an actual item, Ex: “Modem” modems

# Trademarks and Service Marks

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- Rights can last indefinitely if owner continues use and files periodic renewal documents.
  - Registration and renewals granted prior to Nov.16, 1989 have a 20-year term
  - Registration and renewals on or after Nov.16, 1989 have a 10-year term
- Principal Register – for fanciful, arbitrary, suggestive marks
- Supplemental Register – for descriptive marks
  - May allow descriptive marks to be registered on Principal Register after 5 years of use in commerce.

# Trademarks and Service Marks

- Owners must take active steps to prevent infringement, as well as from becoming generic (“Kleenex” for tissues or “Xerox” for copies)
  - Ex: Golden Eagle mark and Iowa’s Hawkeye mark
  - Ex: MSU mark used by Northern State University in South Dakota.
- Typically, the mark owner may send a cease and desist letter to an offending party.
- Parties may agree to a co-existence agreement if regionally separated, for example.

# Certification Marks

- Any word, name, symbol, device, or combination thereof, used in commerce with the owner's permission to certify and identify goods or services that meet certain standards or specifications such as:
  - Regional or other place of origin
  - Materials
  - Mode of manufacture
  - Quality
  - Other Accuracy
  - Characteristics or features of goods/services
  - That work was performed on goods or services by members of an organization or union.
    - Ex: “UL” for Underwriters Laboratories  
(manufacturers of electrical equipment)
    - Ex: “Grown in Idaho” for potatoes grown in Idaho
    - Ex: “Good Housekeeping” seal of approval

Attorney of  
Record

Carol H. Morita

Prior  
Registrations

0782589

Type of Mark

CERTIFICATION MARK

Register

PRINCIPAL

Affidavit Text

SECT 15. SECT 8 (6-YR).

Other Data

The certification mark as used by persons authorized by applicant certifies that representative samplings of the goods conform to the requirements of the applicant.

Live/Dead  
Indicator

LIVE





<b>Word Mark</b>	GROWN IN IDAHO
<b>Goods and Services</b>	IC A . US A . G & S: <b>Potatoes</b> and potato products, namely fresh, frozen, refrigerated and dehydrated <b>potatoes</b> . FIRST USE: 19731100. FIRST USE IN COMMERCE: 19731100
<b>Mark Drawing Code</b>	(3) DESIGN PLUS WORDS, LETTERS, AND/OR NUMBERS
<b>Design Search Code</b>	01.17.11 - Maps, States of the United States; States (map of) 01.17.25 - Bodies of water (maps); Cities (maps); Counties (maps); Maps or outlines of other geographical areas 26.11.02 - Plain single line rectangles; Rectangles (single line) 26.11.21 - Rectangles that are completely or partially shaded
<b>Serial Number</b>	76542378
<b>Filing Date</b>	September 3, 2003
<b>Current Filing Basis</b>	1A
<b>Original Filing Basis</b>	1A
<b>Published for Opposition</b>	October 5, 2004
<b>Registration Number</b>	2914307
<b>Registration Date</b>	December 28, 2004
<b>Owner</b>	(REGISTRANT) State of <b>Idaho</b> Potato Commission STATE AGENCY <b>IDAHO</b> 599 West Bannock Street P.O. Box 1068 Boise <b>IDAHO</b> 837011068
<b>Attorney of Record</b>	Thomas W. Brooke
<b>Prior Registrations</b>	0631499;0802418;0943815;1233007;AND OTHERS
<b>Type of Mark</b>	CERTIFICATION MARK
<b>Register</b>	PRINCIPAL
<b>Other Data</b>	The certification mark, as used by person authorized by the certifier, certifies the regional origin of <b>potatoes</b> grown in the State of <b>Idaho</b> and certifies that those <b>potatoes</b> conform to grade, size, weight, color, shape, cleanliness, variety, internal defect, external defect, maturity and residue level standards promulgated by the certifier.
<b>Live/Dead Indicator</b>	LIVE





<b>Word Mark</b>	GOOD HOUSEKEEPING PROMISES LIMITED WARRENTY TO CONSUMERS REPLACEMENT OR REFUND IF DEFFECTIVE.
<b>Goods and Services</b>	IC A . US A . G & S: Appliances and housewares, namely, Coffee Makers, Dishwashers, Dryers, Freezers, Irons, Steamers, Ovens, Refrigerators, Vacuums, Washers; Beauty and personal care products, namely, Toothpaste, Toothbrushes, Insect repellant, Hair dye, Jewelry cleaner, Cosmetics, Skin lotion, Skin powders, Cosmetic brushes, Tweezers, Clippers, and Cosmetic scissors; Cleaning, Kitchen, and Household items, namely, Paper towels, Napkins, Water filtration systems, Dish washing detergent, Toilet paper, Air freshener, Laundry detergent, Paper cups, Plastic household utensils, namely, forks, knives, and spoons, Storage boxes, Trash bags, Plastic wrap, Window cleaner, Cleansing products; Childcare and Toys, namely, Stuffed animals, Childrens clothing, Childrens accessories, namely, backpacks and lunchboxes, Disposable diapers; Health aids and remedies, namely, Lozenges, Allergy medication, Fiber supplements, Blood pressure monitors, Massagers, Heating pads, Cough medicine; Food and Beverages, namely, Canned food, Canned soup, Pasta, Eggs, Cooking oils, Pasta sauce, Meat, Sugar substitutes, Cooking sprays, Rice, Pretzels, Chips; Home Building and Decorating products, namely, Cabinetry, Countertops, Carpeting, Flooring, Roofing, Siding, Windows, Home Furniture, Garage doors, Garage door openers, Garden supplies, Home heating systems, Home air conditioning systems, Interior doors, Mattresses, Paints, Wall paper, Home water treatment systems; Consumer electronics, namely, Rechargeable batteries, Cell phone, Cell phone accessories. FIRST USE: 19100101. FIRST USE IN COMMERCE: 19100101
<b>Mark Drawing Code</b>	(3) DESIGN PLUS WORDS, LETTERS, AND/OR NUMBERS
<b>Design Search Code</b>	01.01.03 - Star - a single star with five points 26.03.03 - Incomplete ovals; Ovals, incomplete 26.03.08 - Letters, numerals or punctuation forming the perimeter of an oval or bordering the

# Collective Marks

- Trademark or service mark used in commerce by members of a cooperative, association, or other collective group.
- Includes a mark indicating membership in a union, association, or other organization.
- Can be used for products and/or services.
- Collective marks may be used by members of the group that owns them, while certification marks may be used by anyone who complies with standards defined by the owner of the certification mark.
  - Ex: "ASOA" used by the American Society of Cataract and Refractive Surgery

Word Mark	ASOA
Goods and Services	<p>IC 016. US 038. G &amp; S: brochures, newsletters and reference manuals regarding office practice management in the field of ophthalmology. FIRST USE: 19870000. FIRST USE IN COMMERCE: 19870000</p> <p>IC 042. US 100. G &amp; S: association services; namely, promoting the interests of ophthalmic administrators and the field of ophthalmic administration. FIRST USE: 19870000. FIRST USE IN COMMERCE: 19870000</p> <p>IC 200. US 200. G &amp; S: exercising legitimate control over the use of the collective mark shown in the accompanying drawing for indicating membership in a society of ophthalmic administrators. FIRST USE: 19870000. FIRST USE IN COMMERCE: 19870000</p>
Mark Drawing Code	(1) TYPED DRAWING
Design Search Code	
Serial Number	74138497
Filing Date	February 11, 1991
Current Filing Basis	1A
Original Filing Basis	1A
Published for Opposition	March 24, 1992
Registration Number	1694315
Registration Date	June 16, 1992
Owner	(REGISTRANT) American Society of Cataract and Refractive Surgery CORPORATION CALIFORNIA 4000 LEGATO ROAD Suite 850 Fairfax VIRGINIA 220334055
Attorney of Record	HOLLIS R. COPELAND
Type of Mark	TRADEMARK. SERVICE MARK. COLLECTIVE MEMBERSHIP MARK
Register	PRINCIPAL
Affidavit Text	SECT 15. SECT 8 (6-YR). SECTION 8(10-YR) 20020402.
Renewal	1ST RENEWAL 20020402
Live/Dead Indicator	LIVE

# Trademarks and Service Marks

## ■ Forbes Magazine's

Top 10 most valuable brands (utilizing trademark value):

1. Apple	\$124.2 Billion
2. Microsoft	\$ 63.0 Billion
3. Google	\$ 56.6 Billion
4. Coca-Cola	\$ 56.1 Billion
5. IBM	\$ 47.9 Billion
6. McDonald's	\$ 39.9 Billion
7. General Electric	\$ 37.1 Billion
8. Samsung	\$ 35.0 Billion
9. Toyota	\$ 31.3 Billion
10. Louis Vuitton	\$ 29.9 Billion

# Copyrights ©

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- Registration is through the U.S. Copyright Office.
- Protect the particular way or form an author has expressed himself or herself, but not the subject matter, ideas, systems, or factual information conveyed.
- Available for published and unpublished works.
- Registration provides statutory protections that works that are not registered do not possess.

# Copyrights ©

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- Provide protection to authors of original works of authorship including:
  - Literary works, books, manuscripts, computer code
  - Dramatic works
  - Musical works
  - Pantomimes and choreographic works
  - Artistic works, paintings, photographs
  - Pictorial, graphic, and sculptural works
  - Motion pictures, films, and audiovisual works
  - Sound recordings
  - Architectural works

# Copyrights ©

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- Copyright Act of 1976 gives the owner the exclusive right to:
  - Reproduce the work
  - Prepare derivative works based upon the work
  - Distribute copies to the public by sale, rental, lease, lending
  - Perform the work publicly
  - Display the work publicly
  - Perform the work publicly by digital audio transmission (for sound recordings)



# Derivative Works

- Work based on or derived from one or more already existing works:
  - Translations into another language
  - Music arrangements
  - Motion picture versions of literary material, novels, or plays
  - Art reproductions
  - Condensations of preexisting works
  - New editions, revisions
  - New versions of existing computer program
  - Revision of a website
- Copyright covers only the additions, changes, or new material, not the preexisting material.

# Compilations

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- Compilations of data or compilations of preexisting works (“collective works”) having original authorship can be copyrightable if the materials are selected or arranged in such a way that the result is a new work:
  - Collection of top music hits of 2014
  - Website using text, graphics, and or photographs
  - Directory of best restaurants in Jackson
  - Academic publication of articles about a specific subject
- Copyright covers only the selection or arrangement of the compilation of data or collection, not the data itself or the preexisting works themselves.

# Right to Prepare Derivative Works

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- Only the owner of copyright has the exclusive right to prepare, or to authorize others to create, derivative works or adaptations of the original work.
- Exceptions to copyright infringement (including derivative works):
  - Fair use scholarship – but not too much
  - Fair use book reviews
  - Fair use parody, criticism, comment

# Copyrights

- Copyright exists when an original creative product is first fixed in a tangible medium of expression.
  - Owned by the author or those deriving their rights through the author
- For works made for hire, the employer and not the employee is considered the author for purposes of copyright ownership.
  - Parties must expressly agree in a written instrument signed by them that the work shall be considered a work made for hire.
- Authors of a joint work are co-owners of the copyright:
  - Each can use the work without the other's consent
  - Must pay the co-owners their share of any profits

# Copyrights

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- A work made for hire is:
  1. A work prepared by an employee within the course and scope of employment; OR
  2. A work specially ordered or commissioned for use as:
    - A contribution to a collective work
    - A part of a motion picture or other audiovisual work
    - A translation
    - A supplementary work
    - A compilation
    - An instructional text
    - A test
    - Answer material for a test
    - An atlas

# Copyrights

- Notice of copyright is not required but beneficial for these reasons:
  - Ex: © 2015 John Smith. All Rights Reserved.
    1. Establishes public record of claim.
    2. Must have registration before filing infringement lawsuit.
    3. Damages are available based on when registration is obtained.
    4. Allows owner to register with U.S. Customs Service to protect against infringing imports.

# Copyrights

- Notice informs the public that a work is protected by copyright.
  - In infringement action, defendant generally cannot claim innocent infringement regarding actual or statutory damages.
- Protection duration depends on when work was originally created and/or published:
  1. Created on or after Jan.1, 1978:
    - Author's life +70 years
    - Works for hire: 95 years from first publication or 120 years from creation, whichever expires first

# Copyrights

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2. Created before Jan.1, 1978 but not published or registered by that date:
  - Same as for works created on or after Jan.1, 1978.
3. Created and published or registered before Jan.1, 1978:
  - Complicated, but generally renewal term from secured date + 67 years and a total term of 95 years.



# Copyrights

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- Copyright Act provides 4 factors to determine whether or not use is fair:
  1. Purpose and character of use, whether it is for commercial purpose or for nonprofit educational use;
  2. Nature of copyrighted work;
  3. Amount used in relation to the whole; and
  4. Effect of use on the market for or value of the work.

# Copyrights

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- Exceptions to owner's exclusive rights: FAIR USE
  - Criticism
  - Comments
  - News reporting
  - Teaching
  - Scholarship
  - Research

# Copyright Ownership

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- Under the Copyright Act, there are 3 types of copyright owners for which the “author” initially owns the copyright:
  - Individual Owners
  - Joint Owners
  - Owners of works made for hire

# Copyright Ownership

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- Individual owners – solely own copyright rights to creation
- Joint owners – Two or more individuals create a joint work
  - Each individual is an owner of an equal share of the copyright to the work, regardless of amount or quality of each contribution.

# Copyright Ownership

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- For works for hire, the employer is considered the author even if the employee created the work.
- Exception (common law) is that copyright in academic writings and scholarly work generally belongs to the teacher/professor. (for example, journal articles, lecture notes, and teaching materials).
- Electronic distance education and online courses have created issues of who owns copyright in material and who has control over distribution, revision, and maintenance.

# Copyright Ownership

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- Copyright ownership, sole or joint, in a university setting, likely depends on the facts (case-by-case basis).
  - Employer control.
  - If a relevant project is highly integrated into university projects or dependent on administration or outside entities.
- University institutions should have clear policies and/or contractual provisions regarding such ownership since, like all IP, institutions should not relinquish property right without negotiation and/or obtaining Fair Market Value.

# Copyright

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- Graffiti: Defined by Merriam-Webster (m-w.com) as:
  - A form of visual communication, having a long history dating back to ancient Roman times, now usually illegal, that involves the unauthorized marking of a public space by an individual or group.
  - An expressive art form, prominent in major urban centers, placed on subways, billboards, trains, walls, and buildings, for example.
- Graffiti could include authorized expressive art forms.





SUNSET PARK UNITY MURAL  
CREATED BY  
SUNSET PARK COMMUNITY FUND, 1991  
1400 10TH AVE. S. SUNSET PARK, NEW YORK  
NY 10009  
FOR MORE INFORMATION, CONTACT  
SUNSET PARK COMMUNITY FUND  
2001





# AUTHORSHIP

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- Involves copyright law but is not synonymous with inventorship.
- For papers or articles, authorship is defined as when one or more individuals contributes to the creation of a paper or article.
- Important to the reputation, promotion, and grant support of authors and the reputation of an institution or university.
- May include researchers who conducted the subject study.

# AUTHORSHIP

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- Includes those who contribute to:
  - Algorithms, equations, or figures used during research.
  - Published reports of scientific research.
  - Words, images in paper or electronic media, published or not.
  - Published reports of new discoveries and ideas.
  - Published reviews of existing knowledge.
  - Educational programs.
  
- Authors contribute to a final written product and might imagine an outcome or solution or write or publish about it, but inventors participate in the inventive step and describe the steps and mechanisms needed to get to the solution.

# AUTHORSHIP

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- Co-authors of an article or publication, including students, co-workers, supervisors, employees, technicians, department chairs, and thesis advisors are not necessarily co-inventors of an invention.
- Standards for authorship and order of authorship of an institution's policy should be followed to preclude adversely affecting effectiveness and reputation of the authors and the institution.

# AUTHORSHIP

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- An author is one who makes a substantial, direct, intellectual contribution to a work (design, analysis, or interpretation of data).
- Others who make substantial contributions, such as acquiring funding or providing technical services or materials, could also be acknowledged.

# Trade Secrets

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- Trade secrets are formulas, practices, patterns, designs, instruments, processes, devices, methods, techniques, or compilations of information used by a business to obtain an advantage over competitors.
- Trade secrets are:
  - Not generally known or easily obtained by proper methods.
  - Economically valuable to their holder, and
  - Should be the subject of reasonable efforts to maintain their secrecy.

# Trade Secrets

- Also known as “confidential information.”
- In business, trade secrets are subject to be protected by:
  - Non-disclosure agreements (confidentiality agreements)
  - Non-compete clauses
- Protection can extend indefinitely (i.e., Coke) since generally not protected by a patent (public disclosure), but are always subject to disclosure or “reverse engineering.”  
(Coke also holds many patents as well).

# Trade Secrets

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- State and Federal laws protect trade secrets:
  - Uniform Trade Secrets Act  
(48 states, D.C., Puerto Rico, Virgin Islands)
  - Economic Espionage Act of 1996 (U.S.)

# Trade Secrets

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- Owner should take reasonable steps to protect and maintain secrecy:
  - Employees – agreement not to reveal employer's proprietary information.
  - Employees – agreement to sign over rights to intellectual property to employer during course of employment and as condition of employment.
  - Other companies or universities – agreement not to disclose secrets in licensing talks or business negotiations.



# Trade Secrets

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- Ex: In February, 2012, federal prosecutors charged 5 individuals, 2 of whom were Dupont employees, and a Chinese company with theft of Dupont's technology to manufacture titanium dioxide (TiO<sub>2</sub>), which was part of a \$17 billion global market.
- Ex: December, 2012, President Obama signed into law the Theft of Trade Secrets Clarification Act, expanding the Economic Espionage Act of 1996 to include trade secret theft relating to products a company sells AND that a company uses internally.
- Ex: In January, 2014, a regional manager of a San Francisco area executive search firm was sentenced to prison and fined for trade secret theft by convincing 3 former co-workers to download and send him customer list information that he used to start his own firm.

# Trade Dress

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- Category of trademark law that refers to a product's image and visual appearance or its package.
  - Includes:
    - 3-dimensional shape
    - Graphic design
    - Color
    - Smell

# Trade Dress

- 2 Basic Requirements for protection:
  1. Features must function as a source indicator – identify a product and maker
  2. Features must be nonfunctional – cannot affect cost, quality, or ability to compete
- Functionality depends on the product:
  - Ex: Color is functional for clothing since it affects appearance and buyers
  - Ex: Color is non-functional on home insulation since it is purchased for in-wall use and not seen
  - Ex: Colors and theme of a restaurant (WENDY'S)
  - Ex: Packaging for Wonder -® bread
  - Ex: Tray configuration for Healthy Choice ® frozen dinners

# Domain Names

- A mark comprised of an Internet domain name is registerable if it functions as an identifier of the source of goods or services.
- It is important to evaluate the commercial impression of the mark as a whole, including the top level Internet domain name (TDL) indicator, such as “.com,” “.org,” and “.edu”.
  - TDLs and uniform resource locators (URLs) “<http://www.>” typically function to indicate a World Wide Web address and not as a source-indicating function.

<b>Word Mark</b>	<b>EBASEBALLCLUB.COM</b>
<b>Goods and Services</b>	IC 035. US 100 101 102. G & S: Online sports recruiting services for high school athletes, namely, providing a website where athletes are able to provide information and player profiles for showcasing their athletic and educational abilities for college recruiters, professional scouts, coaches and other having an interest in obtaining information about athletes and for the providing of information and assistance for allowing athletes, scouts, coaches and college recruiters to evaluate or match athletes with required needs associated with the selection and recruiting of athletes. FIRST USE: 20041116. FIRST USE IN COMMERCE: 20041116
<b>Mark Drawing Code</b>	(3) DESIGN PLUS WORDS, LETTERS, AND/OR NUMBERS
<b>Design Search Code</b>	21.03.01 - Balls (basketballs, table tennis, footballs, etc.); Baseballs; Basketballs; Billiard balls; Bowling balls; Footballs; Golf balls; Paddle balls; Table tennis balls; Tennis balls; Volleyballs 24.09.07 - Advertising, banners; Banners
<b>Serial Number</b>	78520823
<b>Filing Date</b>	November 22, 2004
<b>Current Filing Basis</b>	1A
<b>Original Filing Basis</b>	1A
<b>Published for Opposition</b>	March 14, 2006
<b>Registration Number</b>	3100218
<b>Registration Date</b>	June 6, 2006
<b>Owner</b>	(REGISTRANT) Elite Fantasy League Sports L.L.C. LTD LIAB CO ILLINOIS Suite 102 240 East Ogden Avenue Hinsdale ILLINOIS 60521
<b>Attorney of Record</b>	Burton S. Ehrlich
<b>Type of Mark</b>	SERVICE MARK
<b>Register</b>	PRINCIPAL
<b>Live/Dead Indicator</b>	LIVE



# Semiconductor Mask Works ©

- Covers semiconductor integrated circuits.
- Mask works are used in semiconductor fabrication like stencils to create layers of devices comprising the chip circuitry.
- Semiconductor Chip Protection Act of 1984 protects original mask works when registered with the U.S. Copyright Office.
- Protection rights continue for 10 years from registration date.

# Patent and Trademark Resource Centers

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- PTRC located at Mississippi Library Commission in Jackson.
- Receives and houses copies of U.S. patents and trademark materials
- Good source of information
- [www.uspto.gov](http://www.uspto.gov)
- [www.Google.com/patents](http://www.Google.com/patents)
- [www.wipo.int/](http://www.wipo.int/) (for foreign patents)
- [www.FreePatentsOnline.com](http://www.FreePatentsOnline.com)
- Internet Search

# Why Is It Important to Protect IP?

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- Start-up companies and typically many types of companies today are driven by new business models based on new innovations in technology.
- Many start-ups have few tangible assets or inventory, but may have valuable IP.
- Start-up businesses are generally based on a core concept that may only exist, for example, as computer software running on a few servers.



# Do Universities Need to Protect IP?

- Universities drive IP and research and potentially have enormous reserves of valuable intellectual resources.
- The Mix of IP
  - Patents may be obtained on core developments, products, and methods, including products, processes, and methods of doing e-business, and on software, for example.
  - Trademarks may be used to give a product a unique and recognizable identity in the market or be used as Internet domain names.
  - Service marks may be used to identify unique services offered.
  - Trade dress may be used to characterize visual appearances of a product or its packaging.

# Why Is It Important to Protect IP?

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- Copyrights may be obtained to protect creative expression, paper documentation, electronic content, or computer software.
- Trade secrets may be retained to maintain or control a technology as long as desired.
- Obtaining (by purchase, license, or self-generation), managing, and commercializing IP assets are critical factors that may determine the success or failure of an invention by a company or a university.

# Why Is It Important to Protect IP?

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## ■ Protection of IP

- IP assets should be vigorously protected and defended to prevent theft, misuse, and/or loss.
- IP assets must be asserted against and defended from potential and/or actual infringers or misuse.
- Universities must be diligent to detect and defend against conduct of IP piracy or copying, or risk losing exclusive use of IP assets.

# Why Is It Important to Protect IP?

## ■ Protection of IP (*continued*)

- IP may weaken in value and strength, or be lost, if infringement is not addressed and terminated or if not managed properly.
- IP should not be amicably transferred or given away by a university since it likely is state property.
- Fair Market Value should be the benchmark value of IP when it comes to transfer by licensure or sale of IP assets.

# Methods of Protecting IP

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- Review Internet searches of mark and domain name usage.
- Review USPTO and other databases and printed publications in journals and trade publications for published patents and trademarks.
- Send well-reasoned and data-specific cease and desist letters to infringers.
- Register IP assets with appropriate entities.
- Initiate litigation in state and/or federal court when appropriate and necessary.

# Methods of Protecting IP

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- Require employees to execute contracts of employment with reasonable assignment and/or royalty clauses and use non-disclosure agreements, when appropriate, to protect proprietary information, products, or material.
- Require university researchers/employees to assign rights to ownership of intellectual property created for the university during employment before beginning employment and as a condition of employment.
- Employees should reveal all intellectual property owned or co-owned prior to beginning employment.

# Methods of Protecting IP

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- Require employees and other individuals and companies with whom licensing and business is conducted to execute non-disclosure agreements and confidentiality agreements, as required.
- Set forth and have employees acknowledge employee termination procedures that reinforce the university's IP policies.
- Maintain methods to keep trade secrets proprietary.

# Methods of Protecting IP

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- Maintain carefully planned and executed assignment and license agreements.
- Maintain control and accountability over all licensee(s) regarding matters such as royalties, product quality, product control, and periodic review.
- For outside contract work, ensure by written agreement that all IP created belongs to the university, as required.



# Methods of Protecting IP

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- Practice computer security and physical security.
- Set forth in writing the university's IP policies and have employees acknowledge such policies and receipt thereof.
- Maintain accurate and up-to-date records of all IP assets.

# Methods of Protecting IP

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## ■ Ways to Protect IP Assets

- Evaluate IP assets on a periodic basis and the direction the university is or should be moving.
- Motivate employees to assist in the process of generating additional licensable IP through royalties and other incentives.
- Encourage the disclosure program for employees to provide written evidence of IP concepts and a timely process to evaluate such IP and provide feedback.

# Methods of Protecting IP

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- Regularly hold seminars and provide publications for employees to identify potentially valuable, protectable, and licensable IP.
- Identify potential licensees and partnerships through normal business channels, university associations, trade shows, and on-line searches.

# Common IP Mistakes

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- Failure to obtain written assignments or license of IP rights or rights developed by employees or consultants.
- Missed opportunities for patent protection of inventions – Critical deadlines (statutory 1-year time bar) must be met and understood before trade show demonstrations, publishing technical papers, or offering for sale to 3<sup>rd</sup> parties.

# Common IP Mistakes

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- Poor trademark choice(s) – choosing strong marks adds value to novel product(s) and process(es) for the university.
- Use of IP, including trade secrets from a prior employer – civil and criminal litigation can result from use by employees of customer lists, semiconductor design, computer software, methods, and products, for example.

# Developing an IP Strategy

## ■ Patent Strategy

- Develop an accurate process for identifying potentially patentable inventions and compare to simply using trade secret protection.
- Include potentially patenting both product and method or process of manufacture.
- Determine which inventions are most valuable to protect and which inventions are most likely to be licensable.
- Review others' relevant patent filings.
- Determine in what relevant foreign countries, if any, to file for protection.
- Decisions of protection should ideally be made prior to public disclosure (to protect foreign rights).
- Decisions to disclose certain inventions so 3<sup>rd</sup> parties cannot patent them.

# Developing an IP Strategy

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## ■ Copyright Strategy

- Make certain university has proper transfers of copyrights by employees and independent contractors.
- Register copyrights in important products to ensure legal enforcement and to possibly obtain statutory damages and attorneys fees, if litigation becomes necessary.
- Employees should understand copyright issues to prevent unauthorized use of 3<sup>rd</sup> party software, manuals, or materials.

# Developing an IP Strategy

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- Trademark Strategy and Service Mark
  - Ensure that trademark selection is controlled so each product or service uses a distinctive mark.
  - May use a primary trademark for a group of products and secondary marks for certain products.
    - (Ex: Microsoft uses “Microsoft” on all products and uses secondary marks such as “Internet Explorer” and “WORD” for specific products).



# Developing an IP Strategy

## ■ Trademark Strategy (*continued*)

- Trademark should be “cleared” before adoption to ensure another entity does not have rights to it either in the U.S. or foreign countries.
- Determine in which countries to protect the mark based on importance of the mark and the product
  - (Ex: Adobe Systems, Inc. cleared the mark “Acrobat” in 20+ countries at least 9 months prior to product introduction).

# Developing an IP Strategy

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## ■ Trademark Strategy (*continued*)

- Universities must have policies to ensure their marks are used properly and that their own use does not undercut their ability to enforce them.
- Must ensure university marks are not misused by others or 3<sup>rd</sup> parties and that others do not adopt confusingly similar marks
  - (Ex: Apple Computer successfully objected to the use of “Apple Soup” for computer software by a start-up company).

# Developing an IP Strategy

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## ■ Trade Secret Strategy (*continued*)

- Should have policies in place for protection and ability to prove the use of procedures and efforts to use “reasonable measures” to protect confidentiality.
- Measures should include employee assignment and confidentiality agreements, non-disclosure agreements, and a marking program.

# Developing an IP Strategy

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## ■ Trade Secret Strategy (*continued*)

- Employees should be trained to recognize and properly protect trade secrets.
- Trade secret program should coordinate with patent program, since issuance of a patent (with public disclosure and 20-year protection) terminates trade secret protection (which enjoys effectively endless secrecy and protection).

# Developing an IP Strategy

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## ■ Licensing Strategy

- Carefully review “inbound” license (to the university from 3<sup>rd</sup> parties) to ensure inclusion of rights broad enough to account for evolution of university’s research, products, and future research, the ability to sublicense these rights, and transferability in case of assignment, transfer, or sale.
- Ensure university’s exclusive licenses to 3<sup>rd</sup> parties do not prevent exploiting its own technology in other markets and that they include minimum performance requirements.

# Developing an IP Strategy

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- Licensing Strategy (*continued*)
  - Indemnification for IP infringement.
  - Establish a policy for the use of open source software in university products and ensure its compliance.

# Developing an IP Strategy

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## ■ Royalties and IP Audit

- “If you don’t attempt to measure it, you can’t manage it.”
- Unlike typical assets, IP is generally intangible and IP value may be difficult to measure, at least initially.

# Developing an IP Strategy

- Royalties and IP Audit (*continued*)
  - Royalty and IP audits provide a means of measuring revenue and value to the university due to IP assets:
    - Royalty and IP audits
    - Determine if licensees are in compliance with terms of agreements;
    - Instill confidence in information obtained from licensees;
    - Provide benchmarking and assess changes in technology; and
    - Determine under-utilized assets, new avenues to develop IP assets, and bring the university's departments together.
  - Consider utilizing a 3<sup>rd</sup> party to execute IP audit(s).



# Developing an IP Strategy

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Remember:

- Disclosure is more important than ever under the AIA.
- The use of different IP assets are not mutually exclusive but should compliment each other.

# Developing an IP Strategy

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## ■ One Example:

- A university may decide to register for copyright protection for software, seek patent protection on all or certain aspects of the software, keep other aspects of the software trade secrets, and obtain trademarks and service marks for the product and services, respectively.

Choosing the best course of protection and communalization depends on the factual and marketing circumstances behind each situation.

# IP Commercialization

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- Commercialization is defined as the process of introducing a new product or process into the marketplace, usually for profit.
- University IP can be commercialized through:
  - Promotion by the University itself
  - Gov' t, privately-funded, or collaborative research
  - Licensing
  - Marketing and development
  - University spin-off and start-up companies
  - Assignment/Sales

# IP Commercialization

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- Non-Disclosure Agreement (NDA) is advisable prior to licensing negotiation:
  - NDA identifies parties, confidential information, purposes for which info can be used, and requirements for return of confidential info.

# IP Commercialization

- Material Transfer Agreement (MTA):
  - Governs transfer of physical assets/materials.
    - Biological, plant materials; chemical compounds
  - Transfers possession but NOT legal title.
- University Technology Transfer Office can:
  - Safeguard disclosures
  - Assess technologies
  - Secure IP protection
  - Commercialize promising technologies
  - Connect with commercial partners

# IP Commercialization

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- Process includes:

1. University Tech Transfer Office receives info on discoveries and inventions by disclosure in confidence.
2. TTO assesses technology, develops commercialization plans, and decides with inventors/advisors whether to assert university's rights in the technology.
3. TTO pursues IP protection, if appropriate, through patents, copyrights, trade secrets, and/or trademarks for inventions and works of authorship.

# IP Commercialization

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4. TTO may pursue public and/or private partners to license and/or market the technology.
5. TTO negotiates licensure, commercialization plans, and compensation distributions (fees, royalties, etc.).
6. TTO monitors commercialization development, progress, activity, and compliance.
7. Inventors should be involved in the protection, marketing, and negotiations involving the technology.

# IP Commercialization

- Association of University Technology Managers (AUTM) data for FY 2013:
  - 818 new start-up companies were formed
  - 616 (of 818) had the primary place of business in the University's home state
  - 4,206 start-up companies were operating at end of FY 2013
  - \$22.8 Billion of net product sales were generated in 2012



# IP Commercialization

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- 5,198 licenses executed
- 719 new commercial product sales were created by companies licensing University technology
- Total research expenditures: \$ 65.1 Billion
- Federally-funded research expenditures: \$ 39.9 Billion
- Industry-sponsored research expenditures: \$ 4.58 Billion

# IP Licensing

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- Standard License:
  - TTO licenses the technology to an existing company and distributes income accordingly.
  
- Start-Up Company License:
  - TTO works with inventor(s) for licensure to the start-up.
  - TTO monitors licensure requirements.

# IP Licensing

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- IP owner (University) gives another entity the authority to exploit, make, use, sell products, copy, display, distribute, etc. the IP, in return for royalty income.
- Licensing is most common form of University IP commercialization:
  - University manages technology scope, exclusivity, fees, fields of use, territories of use, royalties, and compliance by both parties.

# IP Licensing

- An IP license should include:
  - Listing of subject matter, i.e. how it's to be used, technical description, application/serial/registration/patent numbers, identification of invention, copyright, trademark, etc.
  - License scope, i.e. making, using, selling products/process; copying/distributing copyrighted material, derivative works; using/branding with trademarks.
  - Technical Field of use (automotive, aerospace, power, solid state electronics).
  - Territory of use

# IP Licensing

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- IP Ownership
- Confidentiality matters
- Exclusivity
- Sub-Licensure
- Term(s) of the license (time duration)
- Compensation matters, i.e. royalties, payment terms, lump sum
- Development rights/matters, improvements, updates
- Warranty matters, i.e. defects in technology & title
- Dispute resolution
- Indemnification matters, i.e. infringement and 3<sup>rd</sup> party claims.

# Jackson State University

## Division of Research and Federal Relations



Thank you

# CONTACT INFORMATION

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