
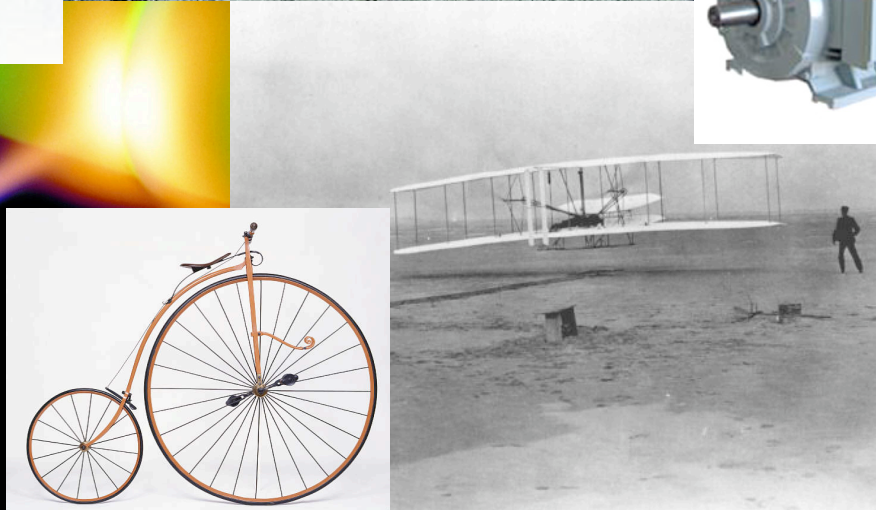
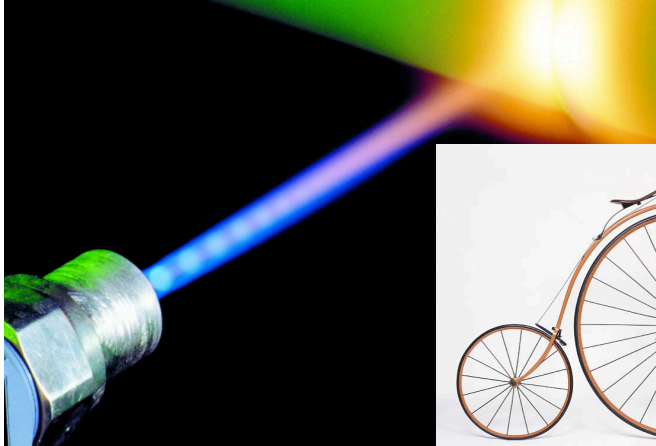
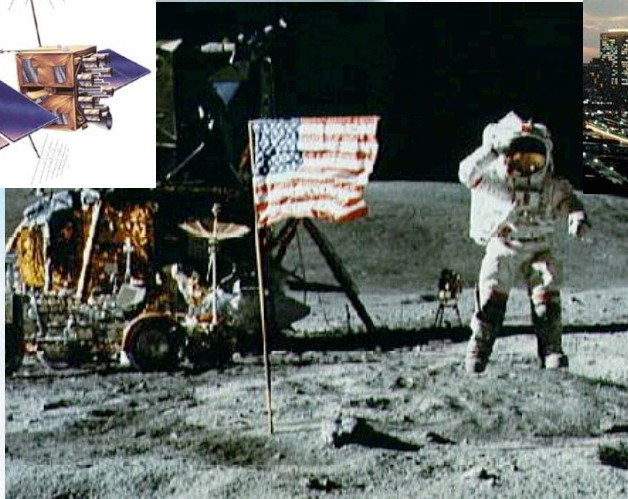
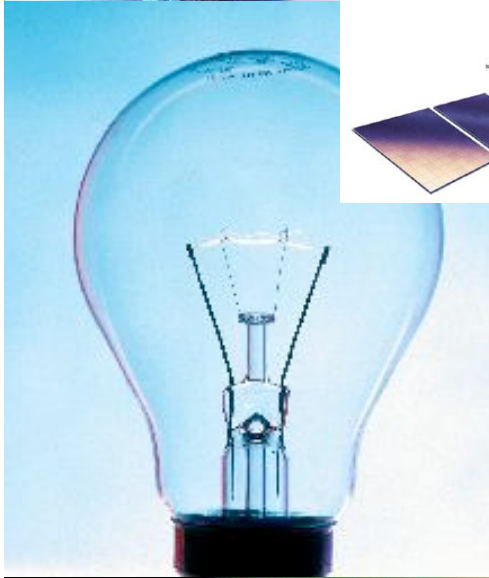
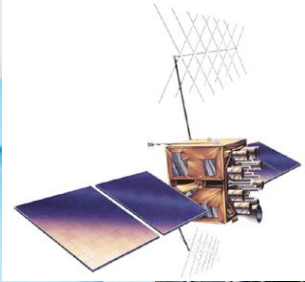


The Intellectual Property Quagmire: or, The Perils of Libertarian Creationism



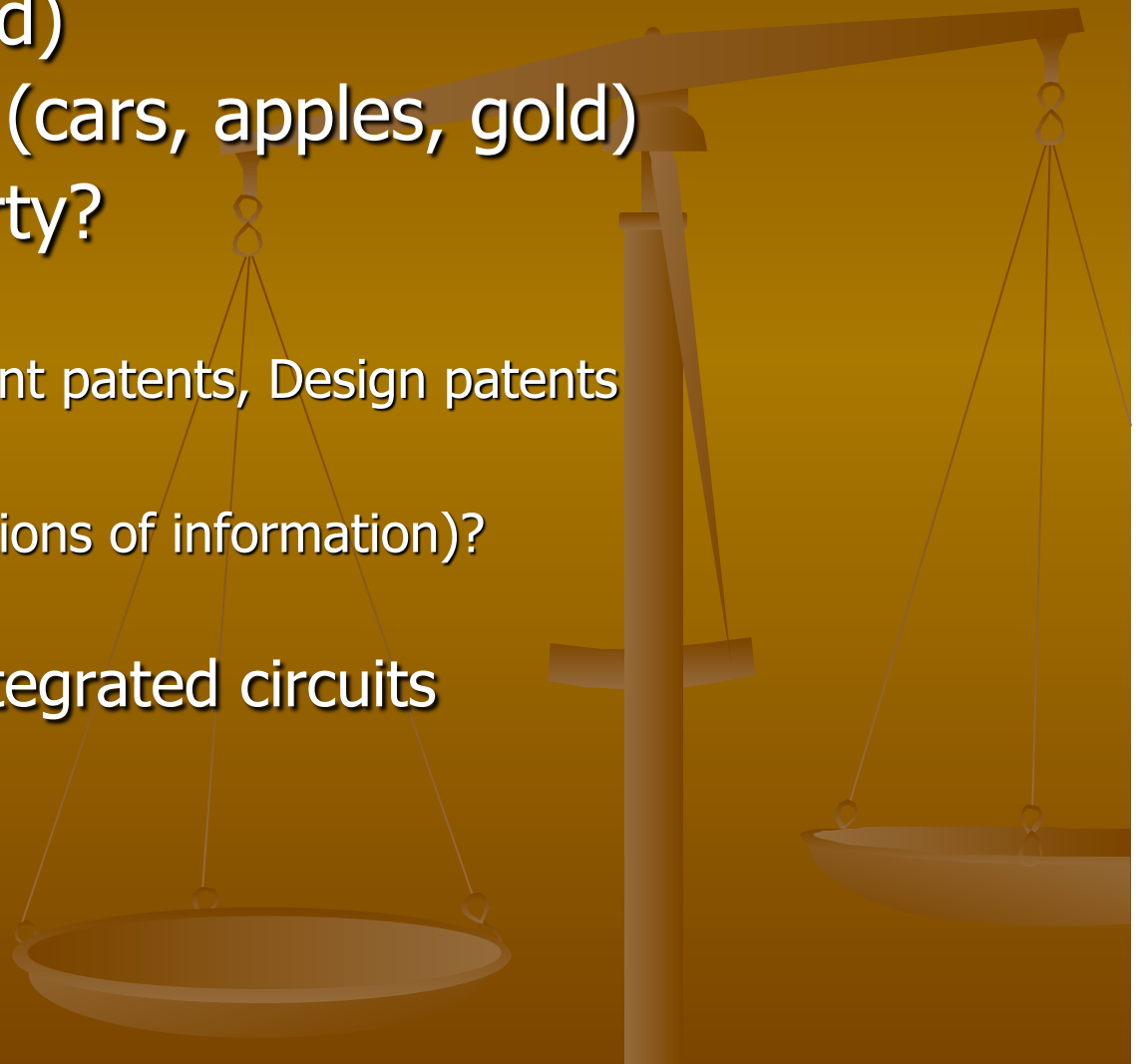
Stephan Kinsella

Austrian Scholars Conference 2008
Ludwig von Mises Institute, Auburn AL
March 13, 2008



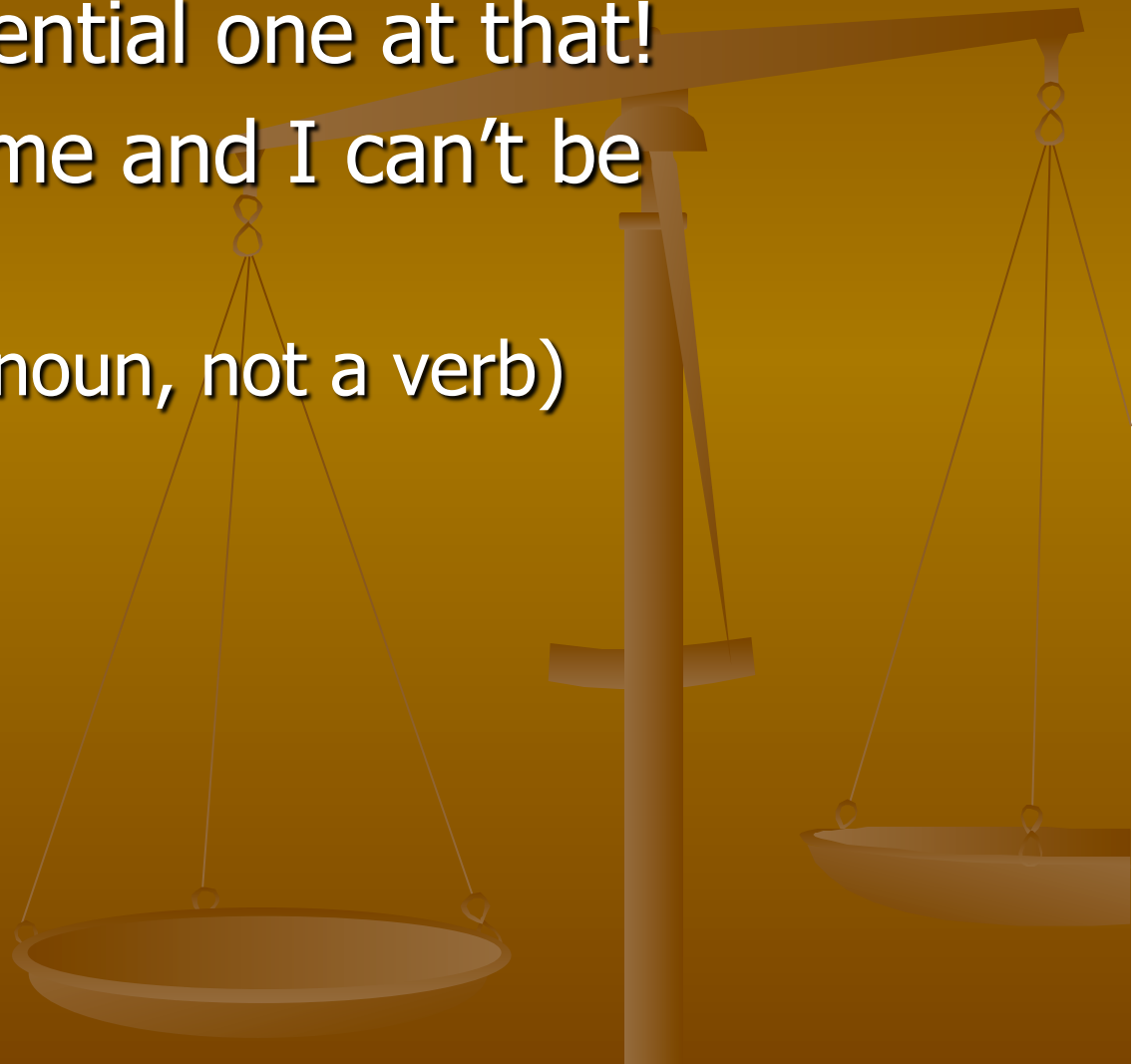
A Type of Property?

- Real property (land)
- Personal property (cars, apples, gold)
- Intellectual Property?
 - **Patents**
 - Utility patents, Plant patents, Design patents
 - **Copyrights**
 - Databases (collections of information)?
 - Boat Hull designs
 - Mask works for integrated circuits
 - Trademarks
 - Trade secrets



I have a copyright!

- And a self-referential one at that!
- You can't copy me and I can't be "copyrighted"
 - (Copyright is a noun, not a verb)



What a Patent Does

- Gives patentee “the right to **exclude** others from **making, using, offering for sale, or selling**” the invention in the United States or “**importing**” the invention into the United States.
 - What is granted is not the right to make, use, offer for sale, sell or import, but the right to exclude others from making, using, offering for sale, selling or importing the invention.

(54) **SPATIALLY COHERENT SURFACE-
EMITTING, GRATING COUPLED
QUANTUM CASCADE LASER WITH
UNSTABLE RESONANCE CAVITY**

(75) Inventor: **Wen-Yen Hwang**, Sugar Land, TX
(US)

(73) Assignee: **Applied Optoelectronics, Inc.**, Sugar
Land, TX (US)

(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 149 days.

(21) Appl. No.: **09/854,800**

(22) Filed: **May 14, 2001**

Related U.S. Application Data

(60) Provisional application No. 60/208,112, filed on May 31,
2000.

(51) **Int. Cl.**⁷ **H01S 3/08**

(52) **U.S. Cl.** **372/45; 372/43; 372/102**

(58) **Field of Search** 372/45, 102, 46,
372/43, 50; 438/31; 385/37; 359/34, 500

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78, No. 19, (2001), pp. 2834-2836.

(List continued on next page.)

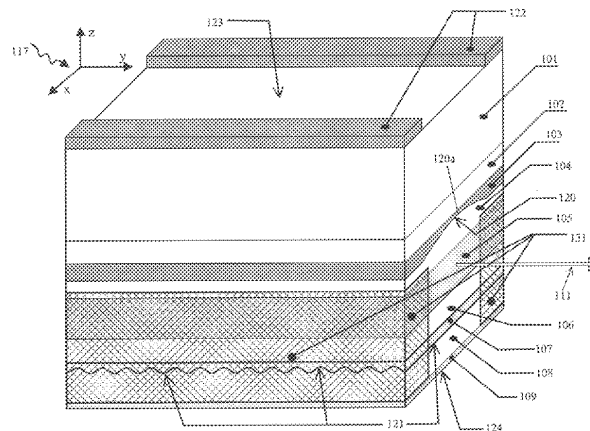
Primary Examiner—Albert W. Paladini

(74) *Attorney, Agent, or Firm*—N. Stephan Kinsella

(57) **ABSTRACT**

A surface emitting, unipolar, quantum cascade semiconduc-
tor laser is constructed of a multilayer semiconductor struc-
ture on a substrate. The laser has doped semiconductor
material only of one conductivity type. The laser includes a
core region having a larger effective refractive index than
cladding regions. The core region includes a plurality of
repeat units, each repeat unit having a nominally identical
active region and a carrier injection and relaxation region.
The repeat units are for quantum cascade generation of a
lasing resonance mode within a lasing resonance cavity of
the multilayer semiconductor structure. A diffraction grating
is fabricated within the multilayer semiconductor structure.
The grating resonantly couples diverging counter-
propagating traveling wave beams of the laser resonance
mode while also diffracting light into an upward direction
perpendicular to a grating plane and toward the substrate
surface, and also into a downward direction. A mirror
reflects the downwardly coupled light toward the upward
direction again. The optical distance between reflecting
mirror and the grating is selected to combine the reflected
light with the upwardly coupled light in-phase as the output
beam. A lens-like media structure having an effective refrac-
tive index profile that varies quadratically in a direction
transverse to the laser resonance cavity is included in the
multilayer semiconductor structure. The lowest value of the
profile is located at a central portion of the laser. The profile
monotonically increases moving away from the central
portion. The lens-like media structure interacts with the
counter-propagating traveling wave beams to provide single
mode output.

47 Claims, 5 Drawing Sheets



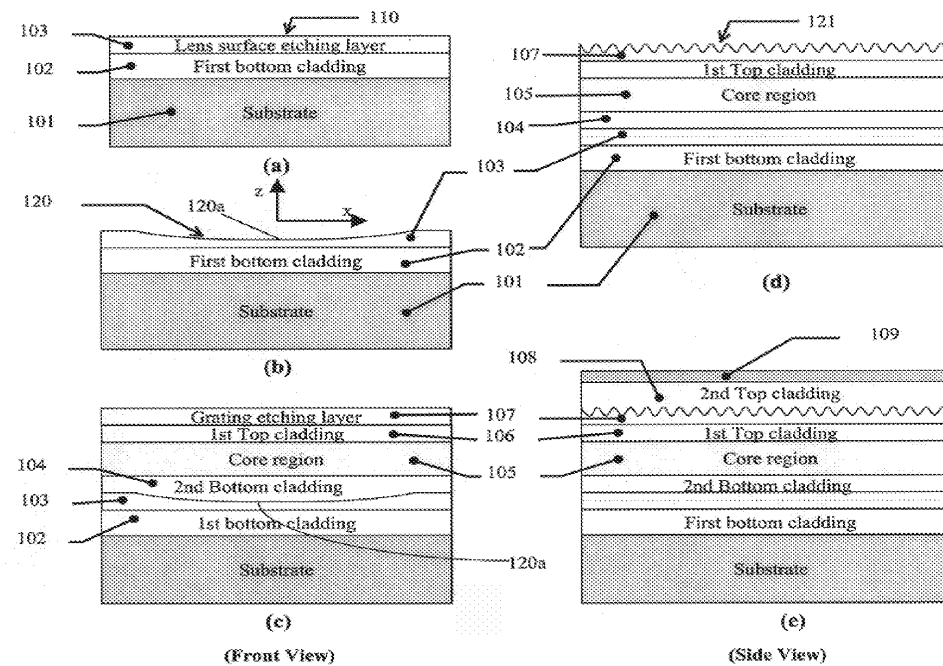
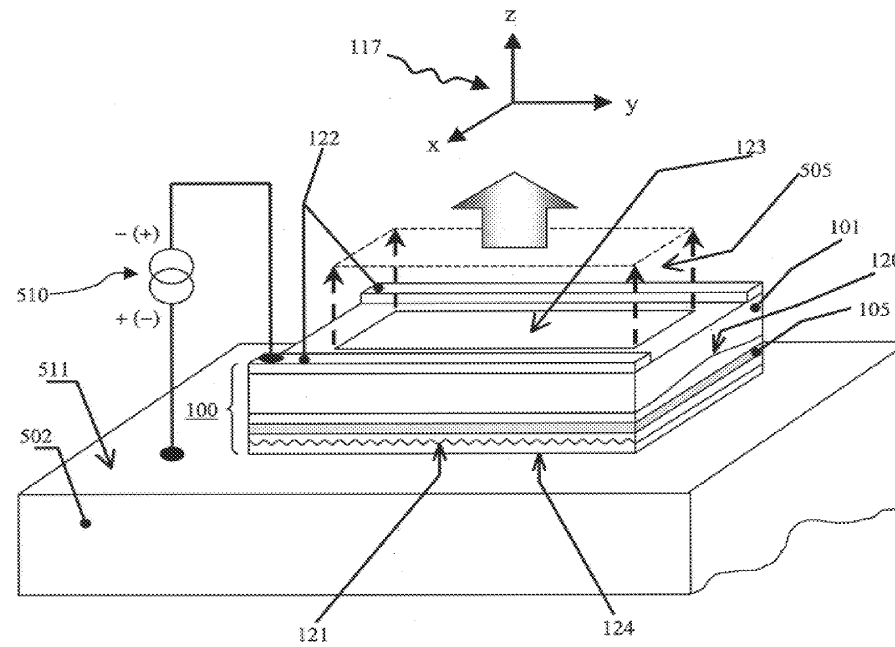


Fig. 3 300

Fig. 5 500

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**SPATIALLY COHERENT SURFACE-
EMITTING, GRATING COUPLED
QUANTUM CASCADE LASER WITH
UNSTABLE RESONANCE CAVITY**

**CROSS-REFERENCE TO RELATED
APPLICATION**

This application claims the benefit of U.S. provisional application No. 60/208,112, filed May 31, 2000, which is incorporated herein by reference in its entirety.

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates generally to sources of electromagnetic laser radiation and, in particular, to unipolar semiconductor quantum cascade (QC) lasers and fabrication thereof.

2. Description of the Related Art

The following descriptions and examples are not admitted to be prior art by virtue of their inclusion within this section.

Lasers have a wide range of industrial and scientific uses. There are several types of lasers, including gas lasers, solid-state lasers, liquid (dye) lasers, and free electron lasers. Semiconductor lasers are also in use. The possibility of amplification of electromagnetic waves in a semiconductor superlattice structure, i.e., the possibility of semiconductor diode lasers, was predicted in a seminal paper by R. F. Kazarinov, et al., "Possibility of the Amplification of Electromagnetic Waves in a Semiconductor with a Superlattice," *Soviet Physics Semiconductors*, vol. 5, No. 4, pp. 707-709 (October 1971). Semiconductor laser technology has continued to develop since this discovery.

There are a variety of types of semiconductor lasers. Semiconductor lasers may be diode lasers (bipolar) or non-diode lasers such as quantum cascade (QC) lasers (unipolar). Semiconductor lasers of various types may be electrically pumped (by a DC or AC current), or pumped in other ways, such as by optically pumping (OP) or electron beam pumping. Semiconductor lasers are used for a variety of applications and can be built with different structures and semiconductor materials, such as gallium arsenide.

Additionally, semiconductor lasers may be edge-emitting lasers or surface-emitting lasers (SELs). Edge-emitting semiconductor lasers output their radiation parallel to the wafer surface, while in SELs, the radiation is output perpendicular to the wafer surface. One type of SEL is the vertical cavity surface emitting laser (VCSEL). The VCSEL structure usually consists of an active (gain) region sandwiched between two distributed Bragg reflector (DBR, or mirror stack) mirrors. The DBR mirrors of a typical VCSEL can be constructed from dielectric or semiconductor layers (or a combination of both, including metal mirror sections). Other types of VCSELs sandwich the active region between metal mirrors. The area between the reflective planes is often referred to as the resonator, or resonance cavity.

Semiconductor diode lasers are attractive as sources of optical energy in industrial and scientific applications. For example, semiconductor diode lasers have a relatively small volume and consume a small amount of power as compared to conventional laser devices. Also, semiconductor diode lasers are monolithic devices that do not require combining a resonance cavity with external mirrors and other structures to generate a coherent output laser beam. Further, the continuous development of semiconductor lasers in the last two decades has significantly improved their maximum output power to the kilowatt range, spanning wavelengths of

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more than 10 μm . Semiconductor lasers are now widely used in industrial processing, telecommunications, data storage, and the like. Despite these improvements, however, semiconductor diode lasers still have a relatively low power output, as compared to other, conventional types of laser devices.

Semiconductor diode lasers, including quantum well lasers, are bipolar semiconductor laser devices. A diode laser typically has n-type layers on one side, and p-type layers on the other side, of an undoped active or core region. Such bipolar laser devices rely on transitions between energy bands in which conduction band electrons and valence band holes, injected into the active region through a forward-biased p-n junction, radiatively recombine across the bandgap. Thus, in diode lasers, the bandgap of the available active region materials essentially determines, and limits, the lasing wavelength. For example, the longer the laser wavelength needed, the smaller the required material bandgap, and vice versa. Unfortunately, the characteristics of small bandgap materials can make it difficult, expensive, or impractical to obtain lasing operation at certain desired wavelengths, such as mid-infrared (mid-IR or MIR) wavelengths.

Semiconductor lasers are typically powered by applying an electrical potential difference across the active region, which causes a current to flow therein. Electrons in the active region attain high energy states as a result of the potential applied. When the electrons spontaneously drop in energy state, photons are produced. Some of those photons travel in a direction perpendicular to the reflective planes of the laser. As a result of the ensuing reflections, the photons can travel through the active region multiple times. When those photons interact with other high energy state electrons, stimulated emission can occur so that two photons with identical characteristics are present. If most electrons encountered by the photons are in the high energy state, the number of photons traveling between the reflective planes tends to increase. A typical laser includes a small difference in reflectivity between its mirrors. The primary laser output is emitted through the reflective plane having lower reflectivity.

The aforementioned QC was initially described in U.S. Pat. No. 5,457,709, which is incorporated herein by reference in its entirety. See also U.S. Pat. Nos. 5,509,025, 5,901,168, and U.S. Pat. No. 6,055,257, which are incorporated herein by reference in their entireties. Unlike diode lasers, QC lasers are unipolar, that is, they are based on one type of carrier (typically electrons in the conduction band), which make inter-subband transitions between energy levels created by quantum confinement. In a unipolar semiconductor laser, electronic transitions between conduction band states arise from size quantization in the active region heterostructure. The inter-subband transitions are between excited states of coupled quantum wells for which resonant tunneling is the pumping mechanism.

A single active region unipolar semiconductor laser is possible, but multiple active regions may be used as well. QC lasers, for example, typically comprise an active region having a plurality (e.g., 25) of essentially identical undoped active regions, sometimes referred to as radiative transition (RT) regions. Each active (RT) region comprises a plurality of semiconductor layers, and has quantum well regions interleaved with barrier regions, to provide two or more coupled quantum wells. These coupled quantum wells have at least second and third associated energy states for the charge carriers (e.g. electrons). The second energy state is of lower energy than the third energy state, which correspond

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toward the +z direction as part of the output laser beam, as described above. An unstable resonance cavity structure has a lens-like media structure to cause beam divergence of the counter-propagating light, which advantageously prevents filamentation effects that cause multimode lasing under high injection current. The combined effect of the grating and the unstable resonance cavity allows the laser to maintain a narrow spectral, single mode, and small diffraction output at high injection current. The output light emitted from the surface area 123 is slightly larger than the current confined stripe area, which is the area between the two regions 122 in FIGS. 1 and 5.

It will be understood that various changes in the details, materials, and arrangements of the parts which have been described and illustrated above in order to explain the nature of this invention may be made by those skilled in the art without departing from the principle and scope of the invention as recited in the following claims.

What is claimed is:

1. A unipolar surface emitting semiconductor laser having a wide lasing region for producing a spatially coherent output beam comprising:

a semiconductor resonance cavity for producing a laser mode of diverging counter-propagating traveling wave beams of light derived from unipolar inter-subband transitions within the wide lasing region of the semiconductor laser;

a diffraction grating for resonantly coupling the diverging counter-propagating traveling wave beams while also coupling a portion of the traveling wave beams into an output beam transverse to the wide lasing region; and

a semiconductor layer for coacting with the traveling wave beams of the resonance cavity and having an effective index of refraction that varies quadratically in a direction transverse to the traveling wave beams of light with the lowest values thereof at centralized portions of the laser and higher values thereof at noncentralized portions of the laser.

2. The laser of claim 1, wherein the diffraction grating comprises a second order Bragg grating.

3. The laser of claim 1, further comprising a reflecting surface spaced from the grating such that a portion of the output beam that is reflected from the reflecting surface before being combined with other portions of the output beam remains in-phase with the other portions of the output beam.

4. The laser of claim 2, wherein the diffraction grating comprises a second Bragg order grating.

5. The laser of claim 1, wherein the semiconductor layer comprises a trough to provide the effective index of refraction variation.

6. A surface emitting semiconductor laser having longitudinal and lateral dimensions, and a transverse dimension perpendicular thereto, a wide active lasing region perpendicular to the transverse dimension for producing a spatially coherent output beam comprising:

a semiconductor resonance cavity producing a laser mode of diverging counter-propagating traveling wave beams of light derived from unipolar inter-subband transitions within an active region of the semiconductor laser and along a centralized axis parallel to the longitudinal dimension; and

a diffraction grating for resonantly coupling the diverging counter-propagating traveling wave beams while also coupling a portion of the traveling wave beams into an output beam transverse to the centralized axis; and

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a semiconductor layer for coacting with the traveling wave beams and having an effective index of refraction that varies quadratically in a direction transverse to the centralized axis, with lowest values thereof at centralized portions proximate or on the centralized axis of the laser and higher values thereof at noncentralized portions of the laser.

7. The laser of claim 6, wherein the diffraction grating comprises a second order Bragg grating.

8. The laser of claim 6, wherein the semiconductor layer comprises a trough to provide the effective index of refraction variation.

9. The laser of claim 8, wherein the diffraction grating comprises a second order Bragg grating.

10. A unipolar surface emitting semiconductor laser having longitudinal and lateral dimensions, and a transverse dimension perpendicular thereto, and a wide active lasing region perpendicular to the transverse dimension for producing a spatially coherent output beam comprising:

a semiconductor resonance cavity for producing a laser mode of diverging counter-propagating traveling wave beams of light derived from unipolar inter-subband transitions within an active region of the semiconductor laser and along a centralized axis parallel to the longitudinal dimension;

a diffraction grating having grooves extending perpendicular to the longitudinal axis for resonantly coupling the diverging counter-propagating traveling wave beams while also coupling a portion of the traveling wave beams into an output beam perpendicular to the centralized axis; and

a semiconductor layer for coacting with the traveling wave beams and having an effective index of refraction that varies quadratically in a direction perpendicular to the centralized axis, with the lowest value thereof at centralized portions of the laser and the higher values thereof at noncentralized portions of the laser proximate the centralized axis.

11. A unipolar semiconductor laser, comprising:

a multilayer semiconductor structure comprising: doped semiconductor material of only one conductivity type;

a plurality of nominally identical active regions, each active region separated from an adjoining active region by a carrier injection/relaxation region, and comprising one or more quantum wells having a higher energy state and a lower energy state for carriers of the one conductivity type;

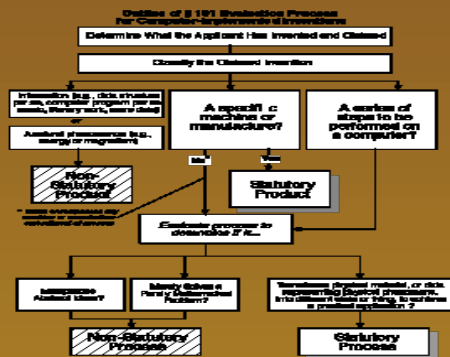
the energy relaxation region selected to provide for energy relaxation of the carriers of the one conductivity type when a current source or electrical bias is coupled to the semiconductor laser, some of the carriers of the one conductivity type being introduced into the energy relaxation region from the active region;

some of the carriers of the one conductivity type undergoing a radiative transition from the higher energy state to the lower energy state;

a diffraction grating for providing feedback in a portion of the multilayered semiconductor structure to enhance the radiative transitions; and

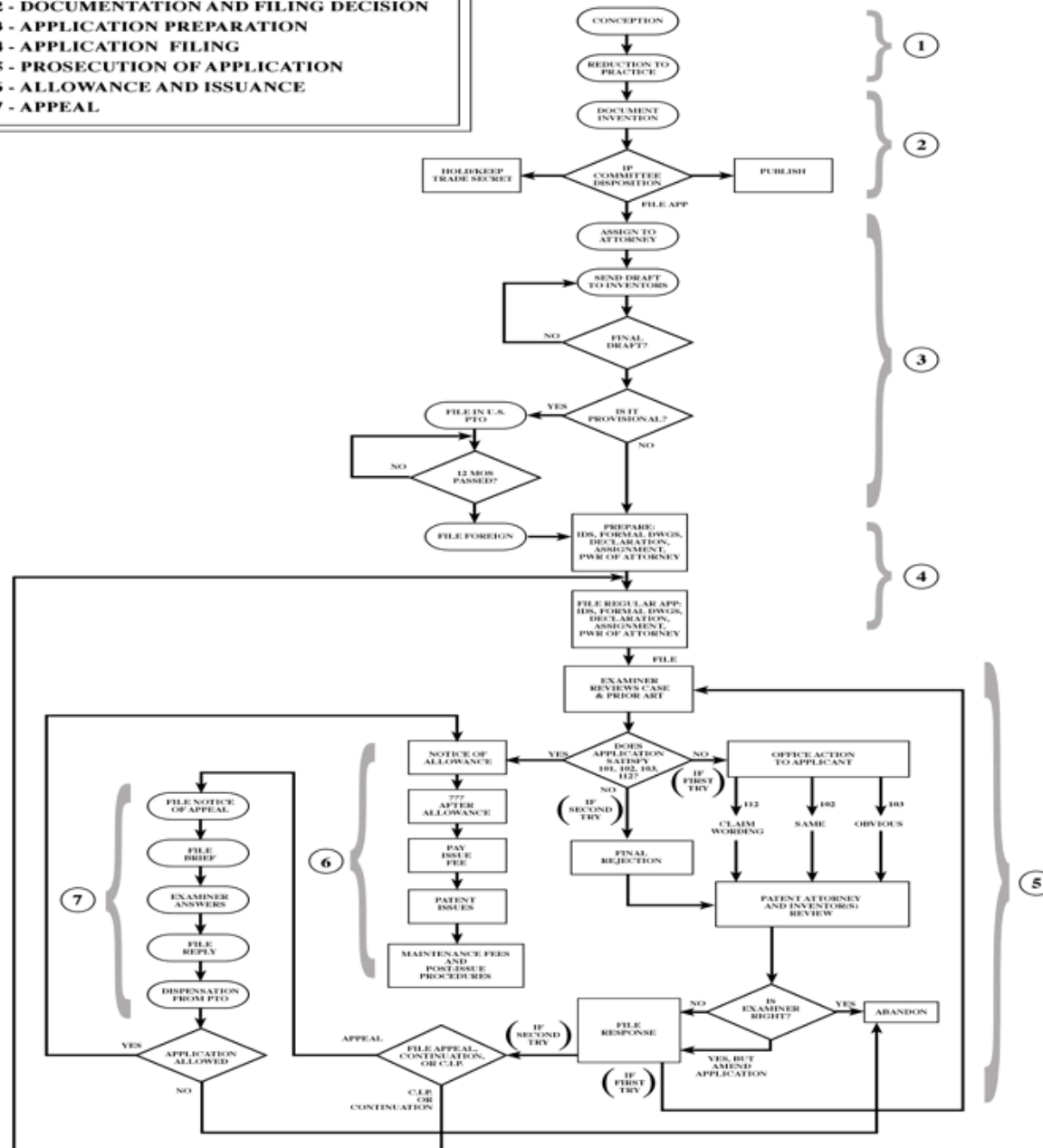
a reflecting surface disposed relative to the grating such that light directed in one direction by the grating and reflected from the reflecting surface that forms a portion of the output light from the laser is in phase with other light directed in a different direction by the grating that forms another portion of the output light.





Patent Prosecution Process

- 1 - CREATION OF THE INVENTION
- 2 - DOCUMENTATION AND FILING DECISION
- 3 - APPLICATION PREPARATION
- 4 - APPLICATION FILING
- 5 - PROSECUTION OF APPLICATION
- 6 - ALLOWANCE AND ISSUANCE
- 7 - APPEAL





(12) **United States Patent**
Olson

(10) **Patent No.:** **US 6,368,227 B1**
(45) **Date of Patent:** **Apr. 9, 2002**

(54) **METHOD OF SWINGING ON A SWING**

5,413,298 A * 5/1995 Perreault 248/228

(76) Inventor: **Steven Olson**, 337 Otis Ave., St. Paul,
MN (US) 55104

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

Primary Examiner—Kien T. Nguyen

(74) *Attorney, Agent, or Firm*—Peter Lowell Olson

(21) Appl. No.: **09/715,198**

(22) Filed: **Nov. 17, 2000**

(51) **Int. Cl.**⁷ **A63G 9/00**

(52) **U.S. Cl.** **472/118**

(58) **Field of Search** 472/118, 119,
472/120, 121, 122, 123, 125

(57) **ABSTRACT**

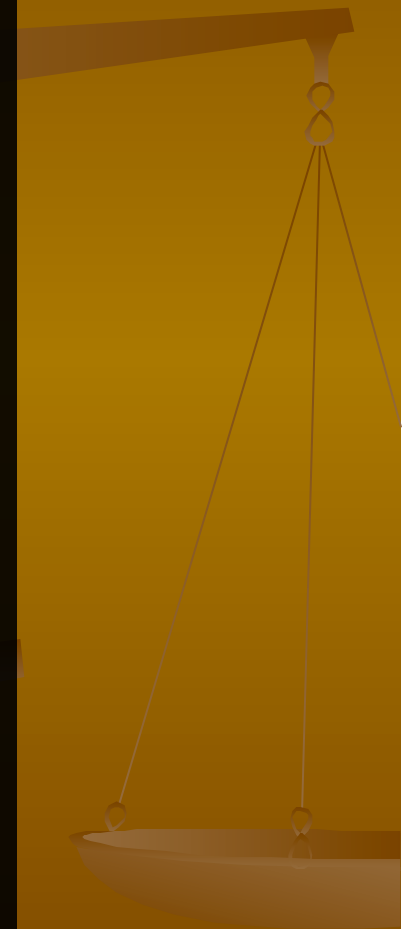
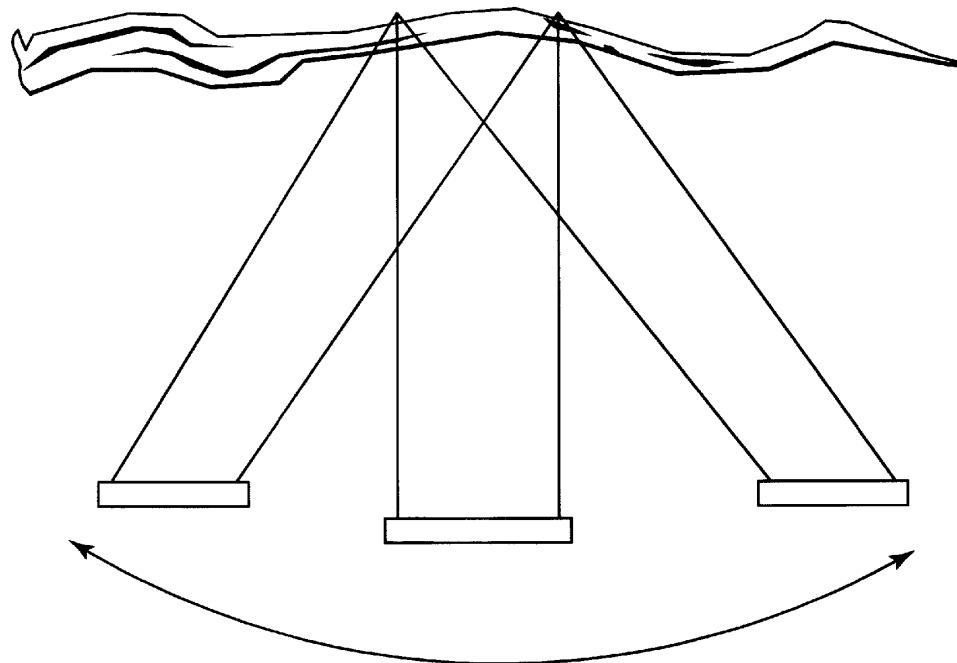
A method of swing on a swing is disclosed, in which a user
positioned on a standard swing suspended by two chains
from a substantially horizontal tree branch induces side to
side motion by pulling alternately on one chain and then the
other.

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4 Claims, 3 Drawing Sheets

242,601 A * 6/1881 Clement 472/118



(12) **United States Patent**
Raines

(10) **Patent No.:** **US 7,228,298 B1**
(45) **Date of Patent:** **Jun. 5, 2007**

(54) **APPARATUS AND METHOD FOR PERUSING
SELECTED VEHICLES HAVING A CLEAN
TITLE HISTORY**

(75) Inventor: **Richard Raines**, Arlington, VA (US)

(73) Assignee: **Carfax, Inc.**, Centreville, VA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 327 days.

(21) Appl. No.: **10/233,952**

(22) Filed: **Sep. 3, 2002**

Related U.S. Application Data

(60) Provisional application No. 60/316,547, filed on Aug. 31, 2001.

(51) **Int. Cl.**
G06F 17/30 (2006.01)
G06F 15/16 (2006.01)

(52) **U.S. Cl.** **707/3; 707/4; 707/100;**
709/223

(58) **Field of Classification Search** **707/104.1;**
705/1, 4, 26, 27, 29, 37; 715/763
See application file for complete search history.

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Primary Examiner—Etienne P. LeRoux

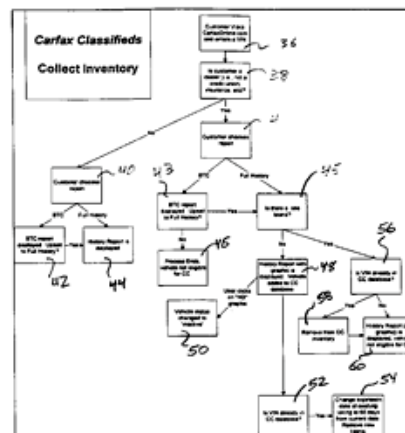
Assistant Examiner—Hassan Tony Mahmoudi

(74) *Attorney, Agent, or Firm*—Tim L. Brackett, Jr.;
NixonPeabody, LLP

(57) **ABSTRACT**

A system and method for allowing a consumer to search a database containing used vehicles from a variety of sellers that can be queried to provide search results that include only vehicles having clean title histories.

24 Claims, 16 Drawing Sheets



United States Patent [19]
Spinosa

[11] **Patent Number:** **4,993,176**
[45] **Date of Patent:** **Feb. 19, 1991**

[54] **CHRISTMAS TREE STAND WATERING SYSTEM**

[76] **Inventor:** Vincent D. Spinosa, 284 Hovendon Ave., Brockton, Mass. 02402

[21] **Appl. No.:** 428,340

[22] **Filed:** Oct. 27, 1989

[51] **Int. Cl.:** A47G 7/02

[52] **U.S. Cl.:** 40/40.5; 47/79

[58] **Field of Search:** 47/40.5, 79, 48.5

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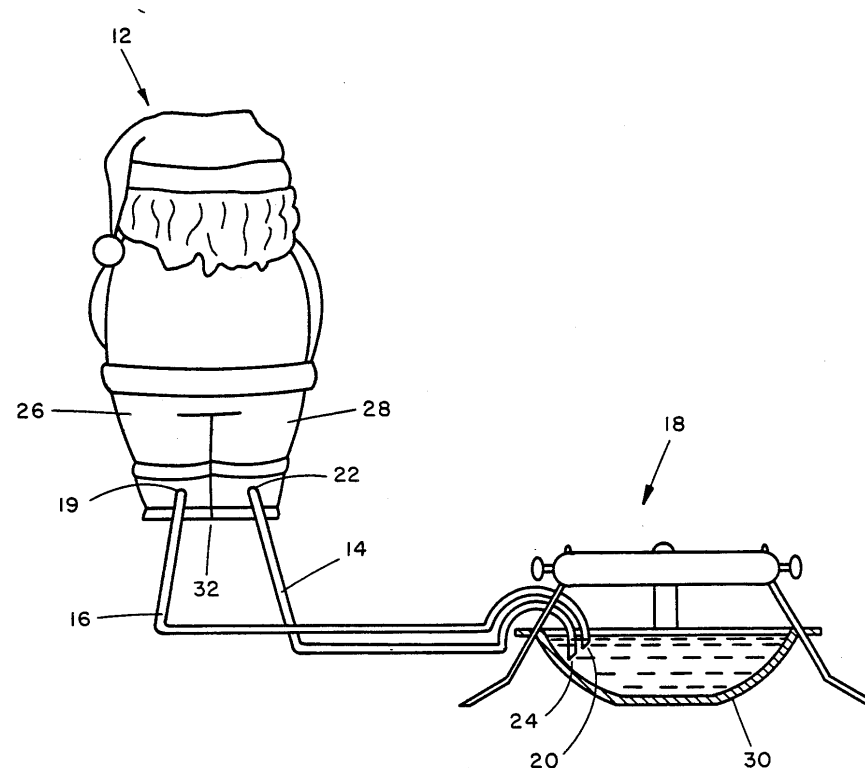
Primary Examiner—Henry E. Raduazo

[57]

ABSTRACT

This is a watering system for a stand for a botanical specimen. The watering system includes an ornamental reservoir from which a water hose and an air hose extend. The hoses have terminal ends which are positioned in the container of the stand. The container is filled with water and the terminal ends are cut on a bias. As the water in the container is depleted, the biased terminal end of the air hose is opened to the atmosphere causing water to flow from the reservoir to the container through the water hose. The watering system could also use a single hose of greater diameter than either of the hoses of the first embodiment. The terminal end of the hose is positioned in the container and is cut on a bias. As the water in the container is depleted, the biased terminal end of the hose is opened to the atmosphere causing water to flow from the reservoir to the container through the bottom half of the hose.

4 Claims, 2 Drawing Sheets



No 819,814.

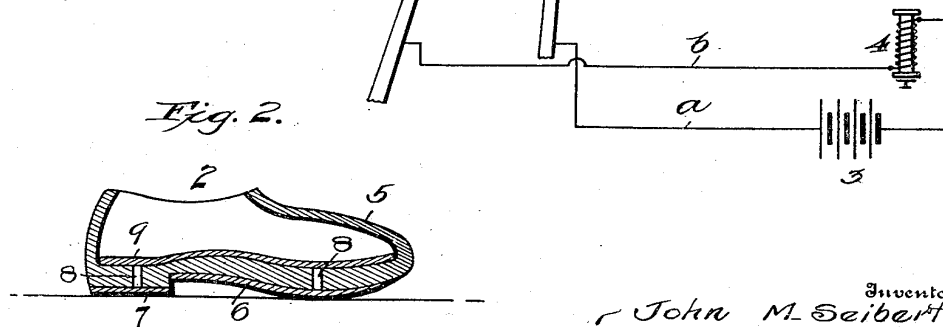
PATENTED MAY 8, 1906.

J. M. SEIBERT.
INITIATION APPARATUS.
APPLICATION FILED JULY 24, 1905.

Fig. 1.



Fig. 2.



Witnesses

D. H. Mochman
R. C. Braddock.

Inventor
John M. Seibert

By

D. P. Wolhaupter

Attorney

United States Patent [19]

Amiss et al.

US005443036A

[11] Patent Number: 5,443,036

[45] Date of Patent: Aug. 22, 1995

[54] METHOD OF EXERCISING A CAT

[76] Inventors: Kevin T. Amiss, 255 S. Pickett St., #301, Alexandria, Va. 22304; Martin H. Abbott, 10549 Assembly Dr., Fairfax, Va. 22030

[21] Appl. No.: 144,473

[22] Filed: Nov. 2, 1993

[51] Int. Cl.⁶ A01K 29/00

[52] U.S. Cl. 119/707

[58] Field of Search 119/702, 707, 174, 905; 446/485

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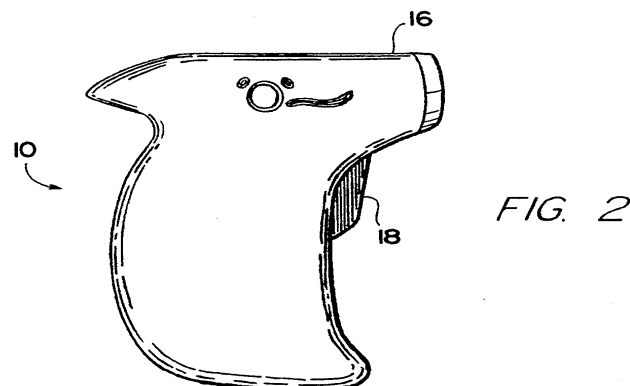
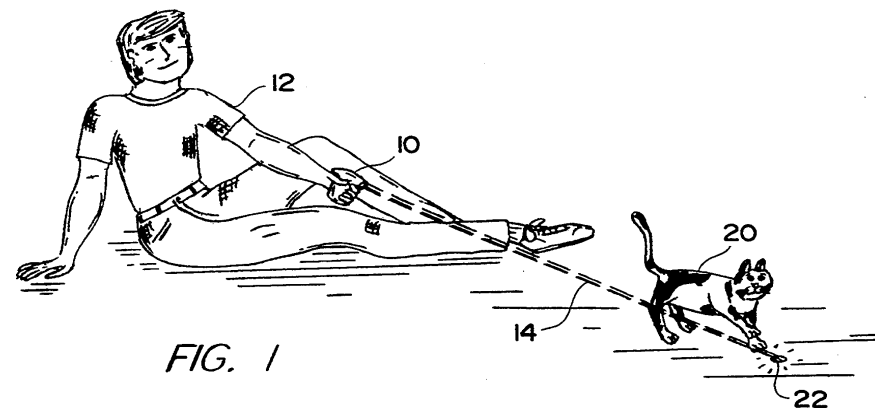
Primary Examiner—Todd E. Manahan

[57]

ABSTRACT

A method for inducing cats to exercise consists of directing a beam of invisible light produced by a hand-held laser apparatus onto the floor or wall or other opaque surface in the vicinity of the cat, then moving the laser so as to cause the bright pattern of light to move in an irregular way fascinating to cats, and to any other animal with a chase instinct.

4 Claims, 1 Drawing Sheet



United States Patent [19]
Piro

[11] **Patent Number:** **4,608,967**
[45] **Date of Patent:** **Sep. 2, 1986**

[54] **PAT ON THE BACK APPARATUS**

[76] **Inventor:** **Ralph R. Piro**, 676 Centre Ave.,
Lindenhurst, N.Y. 11757

[21] **Appl. No.:** **739,669**

[22] **Filed:** **May 31, 1985**

[51] **Int. Cl.⁴** **A61H 7/00**

[52] **U.S. Cl.** **128/61; 4/559;**
15/143 R; 15/210 R; 224/265; 269/3; 272/1 R;
272/76; 446/26; 128/67

[58] **Field of Search** 128/24.2, 24 R, 24 A,
128/25 B, 28, 32-40, 45, 46, 47, 50-53, 56, 57,
59, 61, 62, 65, 66, 67; 272/96, 8 N, 8 R, 76, 27
R, 27 N, 1 R; 15/28, 29, 210 R, 143 R, 144 R,
145; 4/559; 2/44, 45; 269/3; 224/265; 446/26,
28

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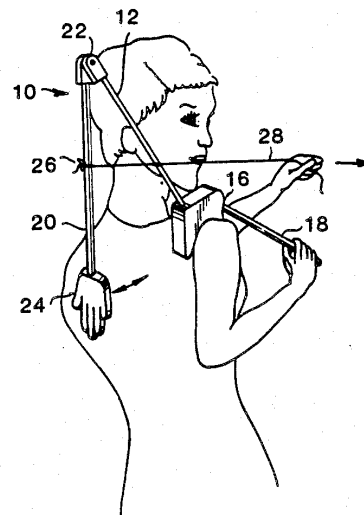
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Primary Examiner—Clyde I. Coughenour
Attorney, Agent, or Firm—John J. Byrne; Bradford E.
Kile; Kevin M. O'Brien

[57] **ABSTRACT**

A self-congratulatory apparatus having a simulated human hand carried on a pivoting arm suspended from shoulder supported member. The hand is manually swingable into and out of contact with the user's back to give an amusing or an important pat-on-the-back.

4 Claims, 2 Drawing Figures



(12) **United States Patent**
Armstrong

(10) **Patent No.:** **US 6,293,874 B1**
(45) **Date of Patent:** **Sep. 25, 2001**

(54) **USER-OPERATED AMUSEMENT
APPARATUS FOR KICKING THE USER'S
BUTTOCKS**

(76) Inventor: **Joe W. Armstrong**, 306 Kingston St.,
Lenoir, TN (US) 37771-2408

(*) 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.: **09/477,175**

(22) Filed: **Jan. 4, 2000**

(51) **Int. Cl.**⁷ **A63H 37/00**

(52) **U.S. Cl.** **472/51; 472/55**

(58) **Field of Search** 472/51, 55, 137;
482/51, 72, 148

(56) **References Cited**

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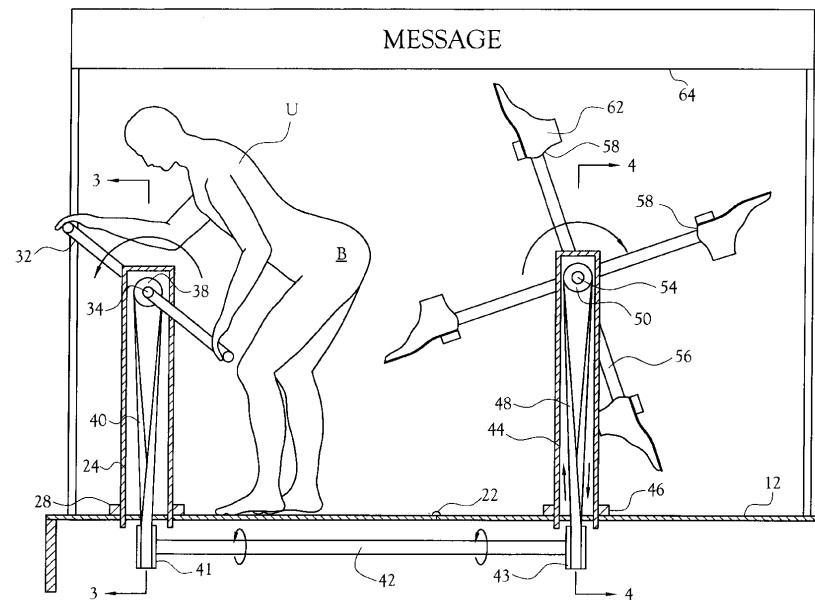
Primary Examiner—Joe H. Cheng
Assistant Examiner—Kim T. Nguyen

(74) *Attorney, Agent, or Firm*—Pitts & Brittan, P.C.

(57) **ABSTRACT**

An amusement apparatus including a user-operated and controlled apparatus for self-infliction of repetitive blows to the user's buttocks by a plurality of elongated arms bearing flexible extensions that rotate under the user's control. The apparatus includes a platform foldable at a mid-section, having first post and second upstanding posts detachably mounted thereon. The first post is provided with a crank positioned at a height thereon which requires the user to bend forward toward the first post while grasping the crank with both hands, to prominently present his buttocks toward the second post. The second post is provided with a plurality of rotating arms detachably mounted thereon, with a central axis of the rotating arms positioned at a height generally level with the user's buttocks. The elongated arms are propelled by the user's movement of the crank, which is operatively connected by a drive train to the central axis of the rotating arms. As the user rotates the crank, the user's buttocks are paddled by flexible shoes located on each outboard end of the elongated arms to provide amusement to the user and viewers of the paddling. The amusement apparatus is foldable into a self-contained package for storage or shipping.

14 Claims, 7 Drawing Sheets



United States Patent [19]

Hartman et al.

[11] Patent Number: 5,960,411

[45] Date of Patent: Sep. 28, 1999

[54] **METHOD AND SYSTEM FOR PLACING A PURCHASE ORDER VIA A COMMUNICATIONS NETWORK**

[75] Inventors: **Peri Hartman; Jeffrey P. Bezos; Shel Kaphan; Joel Spiegel**, all of Seattle, Wash.

[73] Assignee: **Amazon.com, Inc.**, Seattle, Wash.

[21] Appl. No.: **08/928,951**

[22] Filed: **Sep. 12, 1997**

[51] Int. Cl.⁶ **G06F 17/60**

[52] U.S. Cl. **705/26; 705/27; 345/962**

[58] Field of Search 705/26, 27; 380/24, 380/25; 235/2, 375, 378, 381; 395/188.01; 345/962

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(List continued on next page.)

Primary Examiner—James P. Trammell

Assistant Examiner—Demetra R. Smith

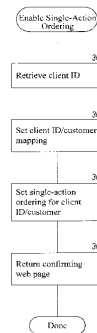
Attorney, Agent, or Firm—Perkins Coie LLP

[57]

ABSTRACT

A method and system for placing an order to purchase an item via the Internet. The order is placed by a purchaser at a client system and received by a server system. The server system receives purchaser information including identification of the purchaser, payment information, and shipment information from the client system. The server system then assigns a client identifier to the client system and associates the assigned client identifier with the received purchaser information. The server system sends to the client system the assigned client identifier and an HTML document identifying the item and including an order button. The client system receives and stores the assigned client identifier and receives and displays the HTML document. In response to the selection of the order button, the client system sends to the server system a request to purchase the identified item. The server system receives the request and combines the purchaser information associated with the client identifier of the client system to generate an order to purchase the item in accordance with the billing and shipment information whereby the purchaser effects the ordering of the product by selection of the order button.

26 Claims, 11 Drawing Sheets



United States Patent [19]
Fredericks

[11] **Patent Number:** **5,075,999**

[45] **Date of Patent:** **Dec. 31, 1991**

[54] **HUNTING DECOY APPARATUS**

[76] **Inventor:** William M. Fredericks, 922 Elizabeth St., Ogdensburg, N.Y. 13669

[21] **Appl. No.:** 612,548

[22] **Filed:** Nov. 13, 1990

[51] **Int. Cl.⁵** A01M 31/06

[52] **U.S. Cl.** 43/1; 43/2;
135/901

[58] **Field of Search** 43/1, 2, 3; 135/901

[56] **References Cited**

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Primary Examiner—Richard K. Seidel

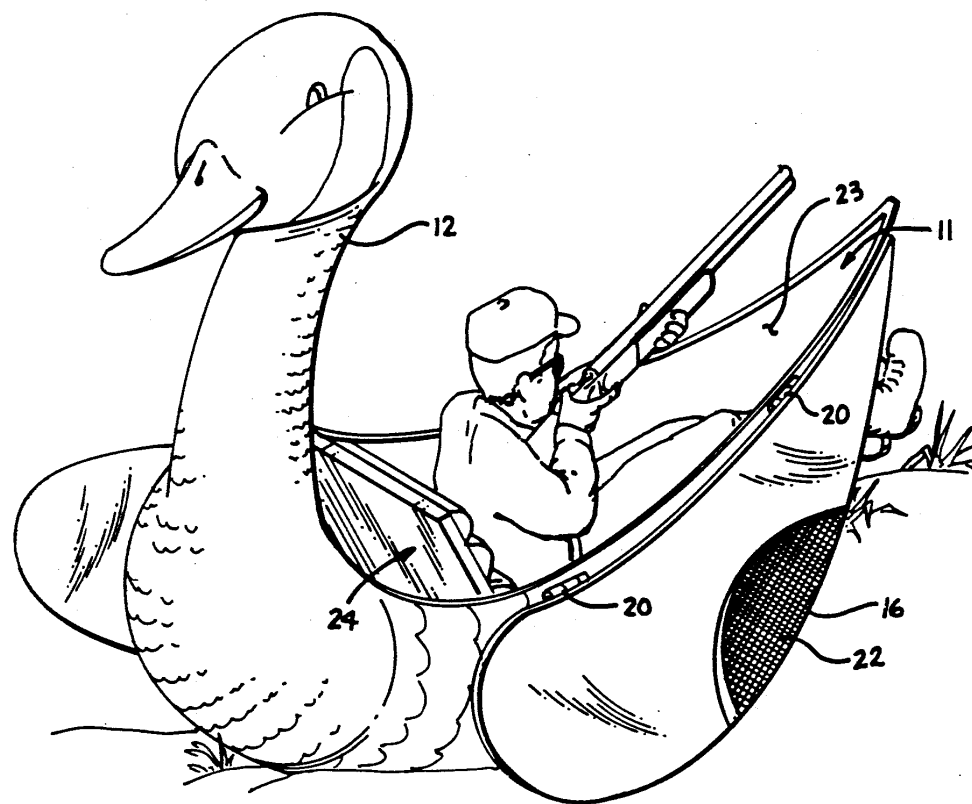
Assistant Examiner—Patty E. Hong

Attorney, Agent, or Firm—Leon Gilden

[57] **ABSTRACT**

An apparatus wherein a housing includes a right and left door overlying the housing, the housing configured to camouflage a hunter interiorly thereof positioned within an "L" shaped seat within the housing. The doors include cooperating mesh portions to permit a viewing of the hunter through the mesh portions of the mesh portion overlying the seat.

1 Claim, 4 Drawing Sheets





WANTED

U.S. POSTAL INSPECTION SERVICE

Leon Gilden



A handwritten signature in black ink, appearing to read "Leon Gilden".

Violations: Conspiracy to commit mail fraud, 18 USC 371.
Mail fraud, 18 USC 1341.

Case No.: 544-1170812-FC(1)

NCIC No.: W159499286

FBI No.: 172868T8

Warrant No.: District of Massachusetts, 5/13/99

Aliases: Jeffrey Johnson, Leon Benjamin

DOB: 8/30/46, Germany

Description: White male, 5' 7", 175 lbs., receding brown hair, blue eyes.

Misc. Info.: Passport No. 073599197, photo date 1999, previously employed as a patent attorney.

Fingerprint: PO PI 14 CO 15
PI CO 17 CI 14

(12) **United States Patent**
Borman

(10) **Patent No.:** **US 7,090,268 B2**
(45) **Date of Patent:** **Aug. 15, 2006**

(54) **DOG WASTE CATCHER AND HOLDER**

(76) Inventor: **Setsuko Borman**, 12012 132nd St.
East, Puyallup, WA (US) 98374

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 133 days.

(21) Appl. No.: **10/794,871**

(22) Filed: **Mar. 8, 2004**

(65) **Prior Publication Data**

US 2004/0201232 A1 Oct. 14, 2004

Related U.S. Application Data

(60) Provisional application No. 60/462,192, filed on Apr. 14, 2003.

(51) **Int. Cl.**
A01K 29/00 (2006.01)

(52) **U.S. Cl.** **294/1.5**

(58) **Field of Classification Search** 294/1.1,
294/1.3–1.5, 55; 248/99; 15/257.1
See application file for complete search history.

(56) **References Cited**

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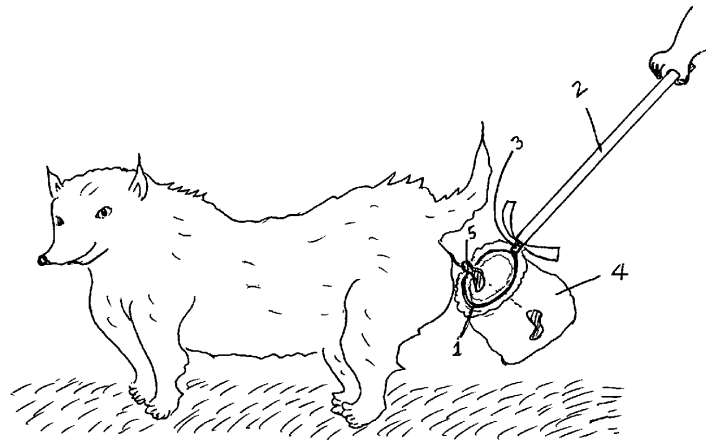
Primary Examiner—Dean J. Kramer

(74) *Attorney, Agent, or Firm*—Christensen O'Connor Johnson Kindness PLLC

(57) **ABSTRACT**

A dog waste catcher and holder is a very simple, light-weight and economical portable device designed to catch and hold a dog's droppings before they fall on the ground or grass. It is carried by a dog's owner or caretaker while he or she walks the dog. This is a device comprised of a loop shaped device to hold a plastic bag, a carrying rod of which one end is attached to the loop shaped device, a securing device such as a bracket to attach the loop shaped device to one end of the carrying rod, and a plastic bag, preferably a plastic bag such as a grocery bag, etc. placed inside the loop shaped device with its upper portion folded over the loop and its ends tied to the rod where the loop shaped device is attached. As soon as the dog shows the motion to excrete, this device can be placed under the dog's bottom and catches the waste in the plastic bag as it excretes. Once the dog has finished excreting, the plastic bag is removed and discarded. This is a very simple and sanitary way of catching and discarding the dog waste.

3 Claims, 1 Drawing Sheet



(12) **United States Patent**
Bontems

(10) **Patent No.:** **US 6,473,908 B1**
(45) **Date of Patent:** **Nov. 5, 2002**

(54) **GARMENT HAVING A BUTTOCKS
CLEAVAGE REVEALING FEATURE**

(76) Inventor: **Thomas A. Bontems**, 1909 E.
Palmercroft Dr., Tempe, AZ (US) 85282

(*) 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.: **10/042,965**

(22) Filed: **Jan. 9, 2002**

(51) **Int. Cl.**⁷ **A41B 9/00**

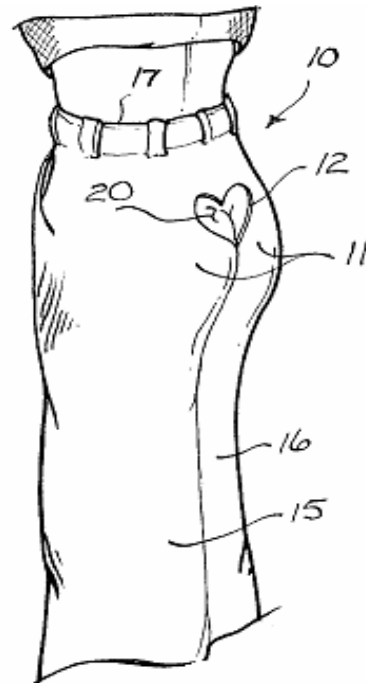
(52) **U.S. Cl.** **2/227; 2/228; 2/69; 2/400**

(58) **Field of Search** 2/400-408, 227,
2/228, 238, 67, 211, 105, 69, 79, 80, 78.1,
83, 78.2, DIG. 1; 450/94, 95, 99, 102-105,
108; D2/700, 712, 718, 731, 732-738,
742

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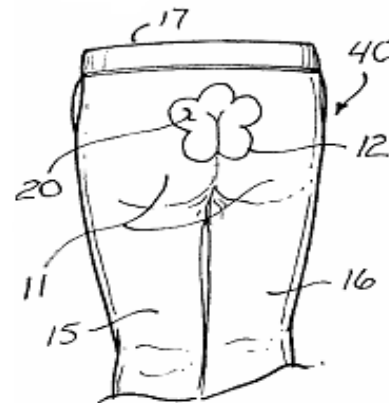
Primary Examiner—Gloria M. Hale

(74) *Attorney, Agent, or Firm*—Parsons & Goltry; Robert
A. Parsons; Michael W. Goltry

(57) **ABSTRACT**

Disclosed is a garment having a buttocks covering portion
and a buttocks cleavage-revealing portion disposed at the
buttocks covering portion. The buttocks cleavage-revealing
portion is an opening and see-through material is disposed at
the opening. The garment is a pant having leg portions
depending from a waist, and the opening is disposed below
the waist.

17 Claims, 1 Drawing Sheet

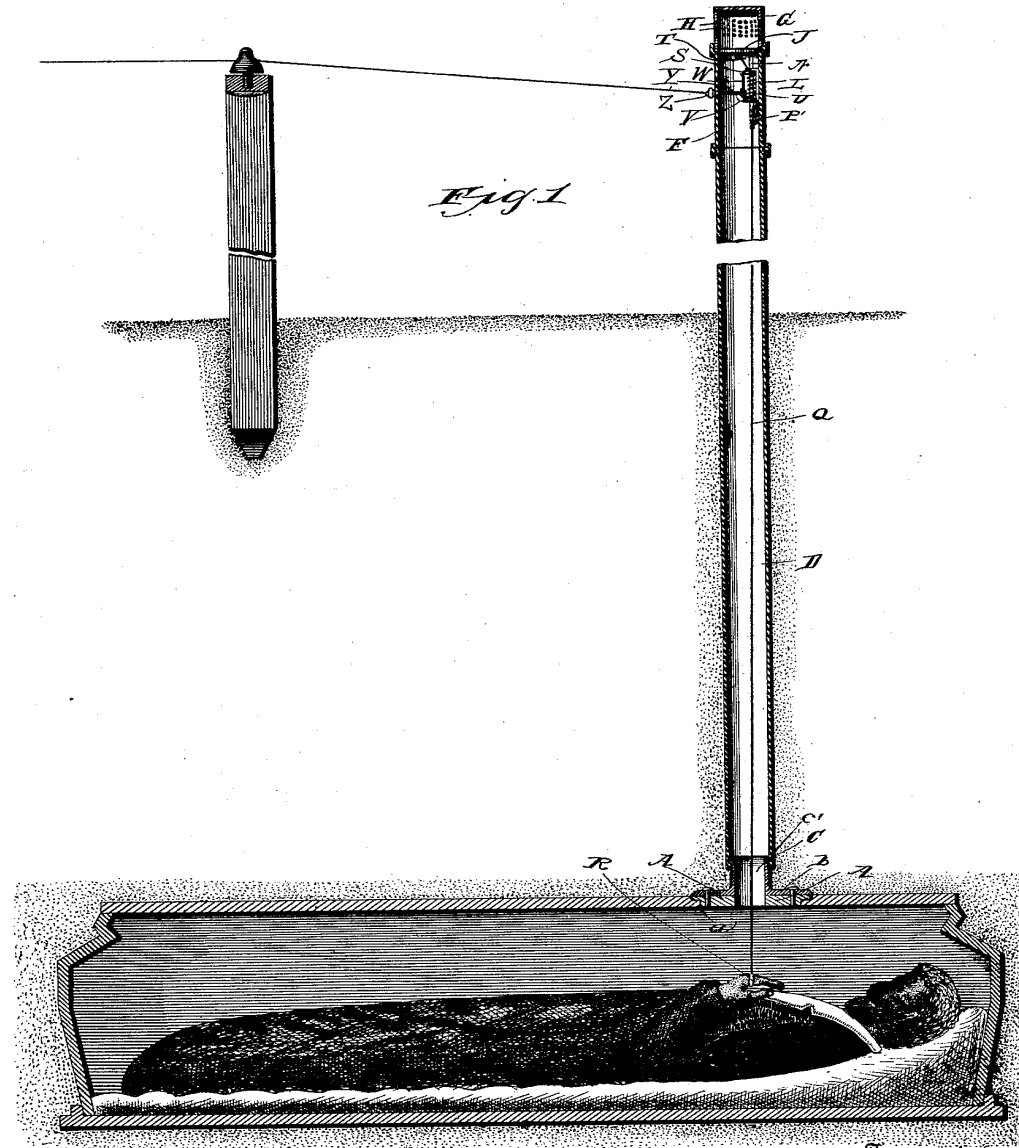


(NO MODEL.)

W. H. WHITE,
ANNUNCIATOR FOR THE SUPPOSED DEAD.

No. 465,548.

Patented Dec. 22, 1891.



Witnesses

G. W. Shreve.
H. E. Price

Inventor

W. H. White.

By *His* Attorneys

Agdon & Agdon.

United States Patent [19]

Smith et al.

[11] 4,022,227

[45] May 10, 1977

[54] METHOD OF CONCEALING PARTIAL
BALDNESS

[76] Inventors: Frank J. Smith, 233 Cosmos Drive;
Donald J. Smith, 517 Brockway
Ave., both of Orlando, Fla. 32807

[22] Filed: Dec. 23, 1975

[21] Appl. No.: 643,681

[52] U.S. Cl. 132/53

[51] Int. Cl.² A41G 3/00

[58] Field of Search 132/53, 54, 9, 7, 5;
2/9

[56]

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Primary Examiner—G.E. McNeill

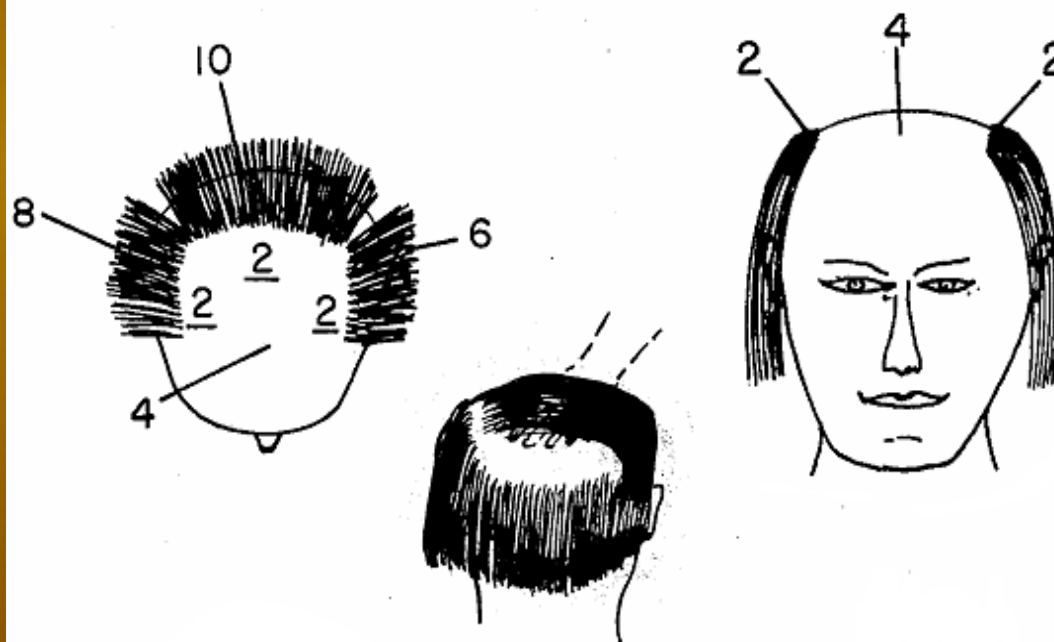
Attorney, Agent, or Firm—John B. Dickman, III

[57]

ABSTRACT

A method of styling hair to cover partial baldness using only the hair on a person's head. The hair styling requires dividing a person's hair into three sections and carefully folding one section over another.

5 Claims, 6 Drawing Figures



[54] **METHOD OF PUTTING**

[76] Inventor: **Dale D. Miller**, 4801 Indigo Dr.,
Wausau, Wis. 54401

[21] Appl. No.: **624,264**

[22] Filed: **Mar. 29, 1996**

[51] Int. Cl.⁶ **A63B 53/00**

[52] U.S. Cl. **473/409**; 473/131; 473/300

[58] Field of Search 473/131, 409,
473/207, 212, 213, 214, 226, 251, 266,
293, 300, 294, 252

[56] **References Cited**

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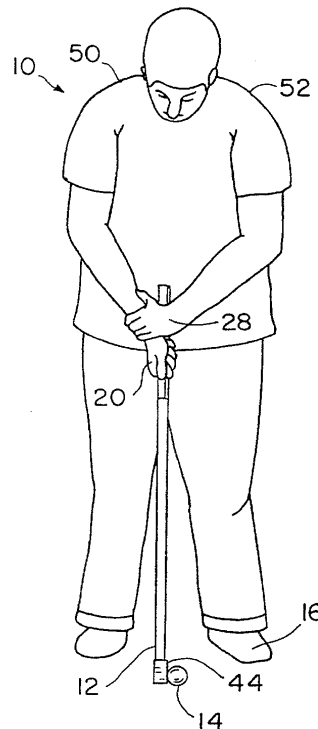
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4,605,228	8/1986	Guendling, Jr.	473/293

Primary Examiner—Steven B. Wong
Attorney, Agent, or Firm—Andrus, Scales, Starke & Sawall

[57] **ABSTRACT**

A method of putting features the golfer's dominant hand so that the golfer can improve control over putting speed and direction. The golfer's non-dominant hand stabilizes the dominant hand and the orientation of the putter blade, but does not otherwise substantially interfere with the putting stroke. In particular, a right-handed golfer grips the putter grip with their right hand in a conventional manner so that the thumb on the right hand is placed straight down the top surface of the putter grip. The golfer addresses the ball as if to stroke the putter using only the right hand. Then, the golfer takes the left hand and uses it to stabilize the right hand and the putter. To do this, the golfer places their left hand over the interior wrist portion of the right hand behind the thumb of the right hand with the middle finger of the left hand resting on the styloid process of the right hand. The golfer presses the ring finger and the little finger of their left hand against the back of the right hand. The golfer also presses the palm of the left hand against the putter grip and squeezes the right hand with the left hand. The golfer then takes a full putting stroke with the above described grip.

13 Claims, 2 Drawing Sheets



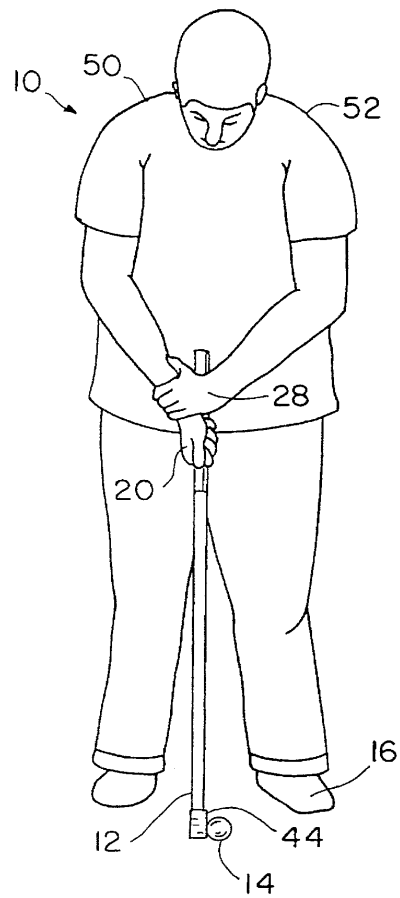


FIG. 1

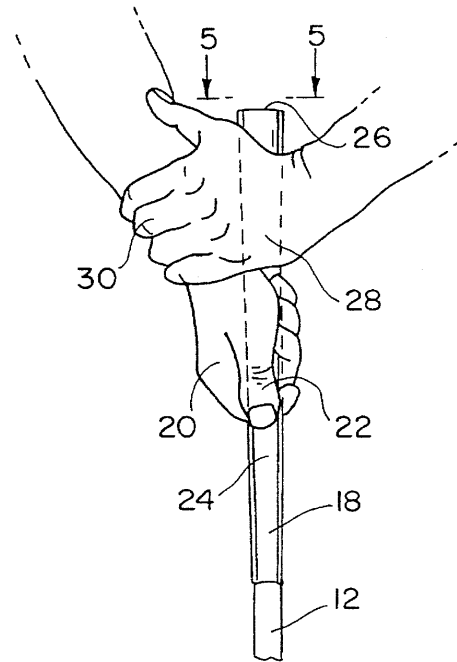


FIG. 2

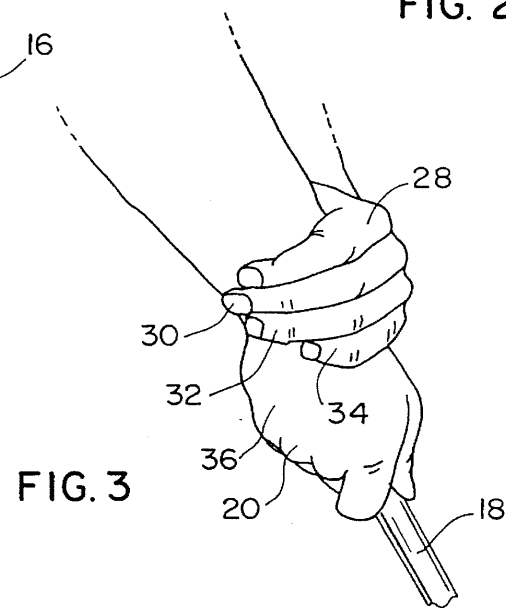
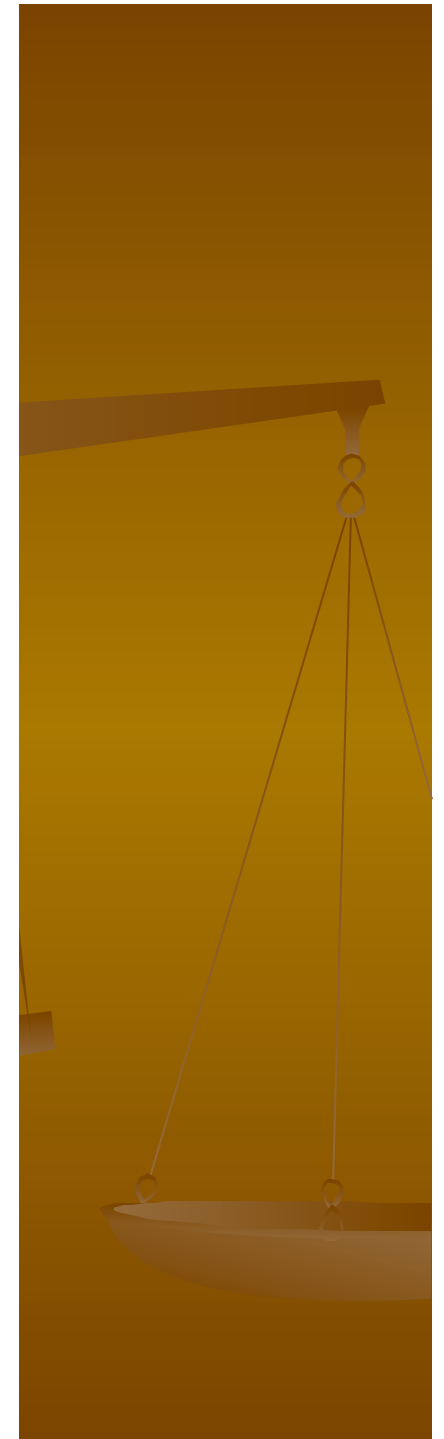


FIG. 3



United States Patent [19]
Pechter

[11] **Patent Number:** **5,965,809**
[45] **Date of Patent:** **Oct. 12, 1999**

[54] **METHOD OF BRA SIZE DETERMINATION
BY DIRECT MEASUREMENT OF THE
BREAST**

[76] Inventor: **Edward Pechter**, 25880 Tournament
Rd, #217, Valencia, Calif. 91355

[21] Appl. No.: **09/149,186**

[22] Filed: **Sep. 8, 1998**

Related U.S. Application Data

[60] Provisional application No. 60/057,838, Sep. 8, 1997.

[51] **Int. Cl.⁶** **G01F 17/00**

[52] **U.S. Cl.** **73/149**

[58] **Field of Search** 73/149, 429; 128/774,
128/778; 33/2 R, 262, 511, 512, 759

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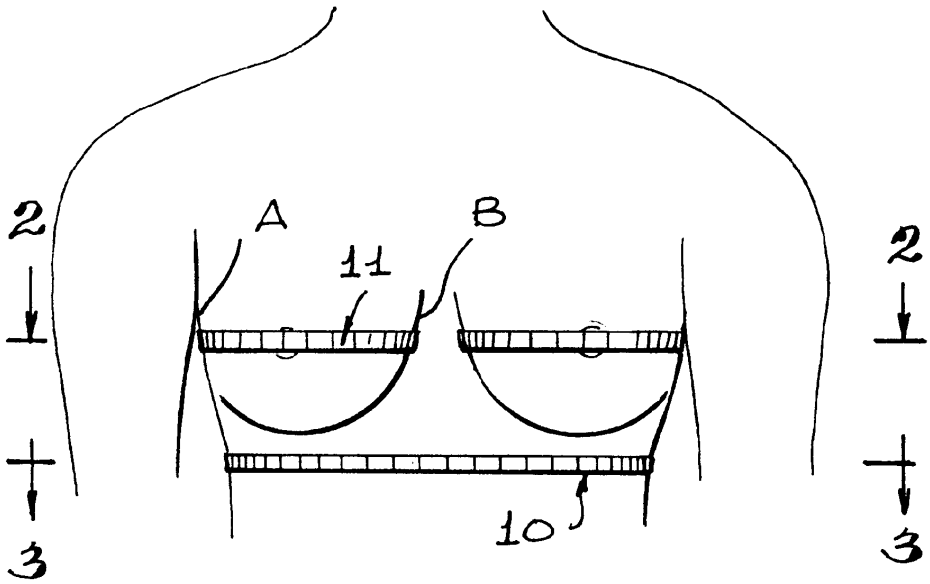
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Primary Examiner—Benjamin R. Fuller
Assistant Examiner—Jewel V. Thompson
Attorney, Agent, or Firm—Roger A. Marrs

[57] **ABSTRACT**

This relates to a method of direct measurement to determine cup size of the breast which includes band size measurement by initially measuring the user's chest or torso circumference with a flexible tape measure immediately below the breasts followed by the step of adding five inches to the measured number and incorporating conventional rounding-off procedures. Next, cup size is determined by directly measuring with the tape the circumference of each unclothed breast from the beginning of the breast mound at one side laterally to the parasternal area medially. Next, a measurement conversion is made wherein a measurement of seven inches corresponds to an "A" size cup, eight inches a "B" size cup, nine inches a "C" cup, etc. Each one inch increment determines a cup size.

8 Claims, 1 Drawing Sheet



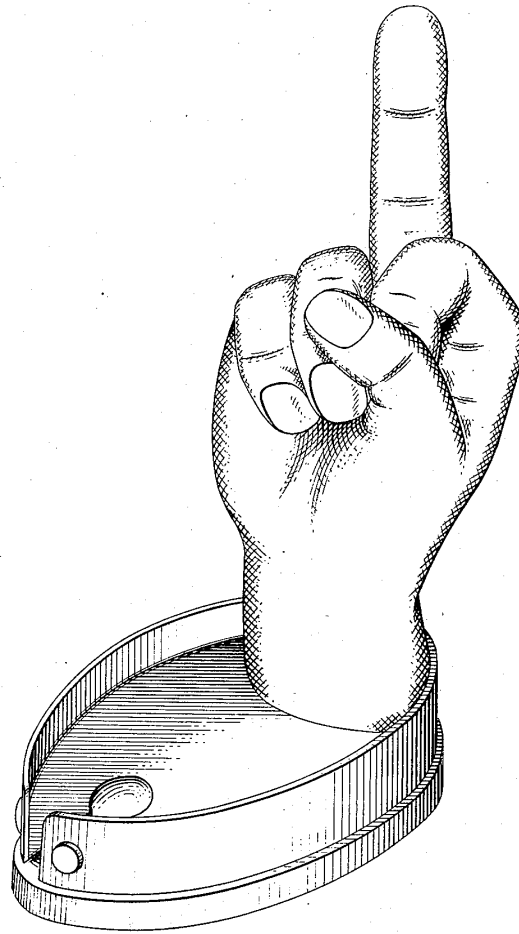
June 4, 1940.

G. J. HORTHER

Des. 120,914

ASH TRAY

Filed Jan. 20, 1940



BY

INVENTOR,
George J. Horther.
R. M. Klein
his ATTORNEY.

[54] DECORATIVE ITEM

[76] Inventor: Lucille S. Rohr, 5725 N. Third St.,
Phoenix, Ariz. 85012

[**] Term: 14 Years

[21] Appl. No.: 61,436

[22] Filed: Jul. 27, 1979

[51] Int. Cl. D11—02

[52] U.S. Cl. D11/159; D16/129

[58] Field of Search D11/131-134,
D11/146, 149, 152, 158, 159, 164; D16/65, 67,
82, 83; D21/51, 52; D27/16, 17, 22, 23

[56] References Cited

PUBLICATIONS

Sports Novelties, p. 2, Horse's Tail Award, in lower
left.

Onyx Trophy Co. Catalogue, p. 3, Trophy RT-30, in
left center.

Hanover House Catalogue, p. 48 ©1970, Skull Ash
Tray, in right center.

Primary Examiner—Leland A. Sebastian
Attorney, Agent, or Firm—Drummond and Nelson

[57] CLAIM

The ornamental design for a decorative item, as shown
and described.

DESCRIPTION

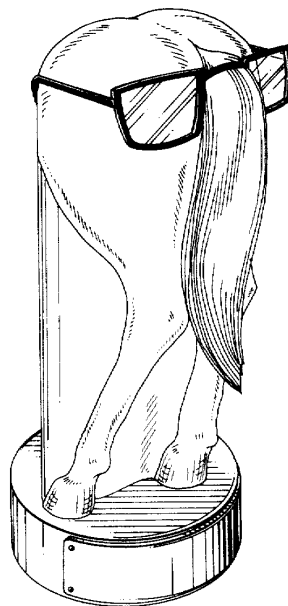
FIG. 1 is a front perspective view of a decorative item
showing my new design;

FIG. 2 is a side elevational view thereof;

FIG. 3 is a rear elevational view thereof;

FIG. 4 is a top plan view thereof;

FIG. 5 is a bottom plan view of the decorative item of
FIG. 1.



United States Patent [19]
Shichman

[11] **Patent Number:** **5,214,803**
[45] **Date of Patent:** **Jun. 1, 1993**

[54] **SMOKE HOOD**

[76] **Inventor:** **David Shichman**, 93 Arleigh Rd.,
Great Neck, N.Y. 11021

[21] **Appl. No.:** **804,088**

[22] **Filed:** **Feb. 19, 1992**

[51] **Int. Cl.⁵** **A42B 1/04**

[52] **U.S. Cl.** **2/202; 2/71;**
2/74

[58] **Field of Search** 2/7, 202, 205, 171,
2/174

[56] **References Cited**

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2,445,487	7/1948	Lester	2/174
2,447,561	8/1948	Brenner	2/174
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2,546,117	3/1951	Whelan	2/174
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4,554,683	11/1985	Wong	2/202
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5,101,512	4/1992	Weinstein	2/174
5,146,636	9/1992	DeLaPena	2/202

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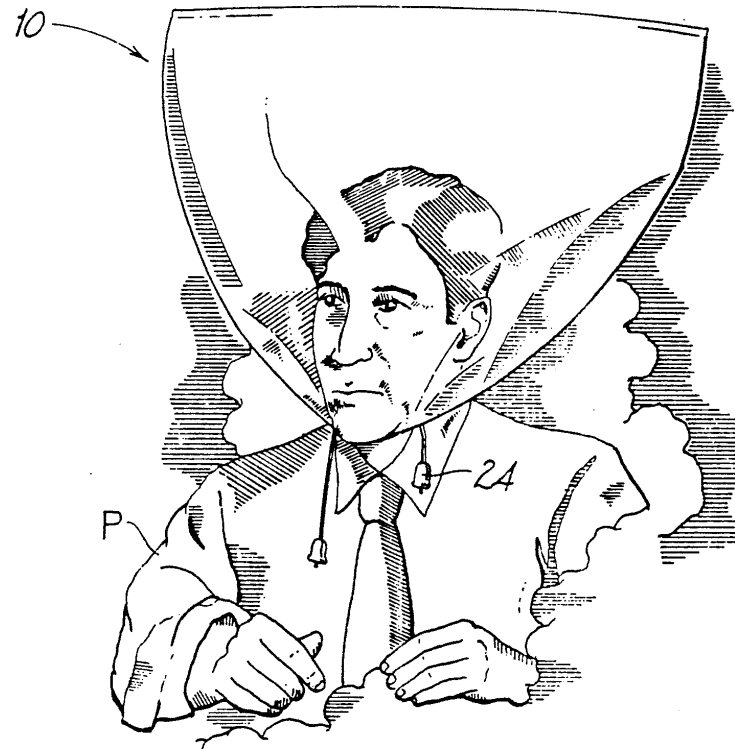
348052	12/1989	European Pat. Off.	2/7
1165524	10/1958	France	2/202
2129670	5/1984	United Kingdom	2/7
2202151	9/1988	United Kingdom	2/7
8202665	8/1982	World Int. Prop. O.	2/202
9005565	5/1990	World Int. Prop. O.	2/205

Primary Examiner—Clifford D. Crowder
Assistant Examiner—Diana L. Biefeld
Attorney, Agent, or Firm—Bauer & Schaffer

[57] **ABSTRACT**

A hood is provided to be worn over the head to protect against smoke and gas. The hood is hermetically sealed on all sides and is provided with an opening into which said head can be introduced. A closure is provided at the opening, so that the hood may be secured substantially airtight about the neck of the wearer.

7 Claims, 2 Drawing Sheets



United States Patent [19]
Petruzzi et al.

[11] **Patent Number:** **6,049,811**
[45] **Date of Patent:** **Apr. 11, 2000**

[54] **MACHINE FOR DRAFTING A PATENT APPLICATION AND PROCESS FOR DOING SAME**

[76] Inventors: **James D. Petruzzi; Robert M. Mason,**
both of 13760 Noel, #820, Dallas, Tex.
75240

[21] Appl. No.: **08/756,444**

[22] Filed: **Nov. 26, 1996**

[51] **Int. Cl.⁷** **G06F 17/21**

[52] **U.S. Cl.** **707/507**

[58] **Field of Search** 707/517-529,
707/507; 705/1

[56] **References Cited**

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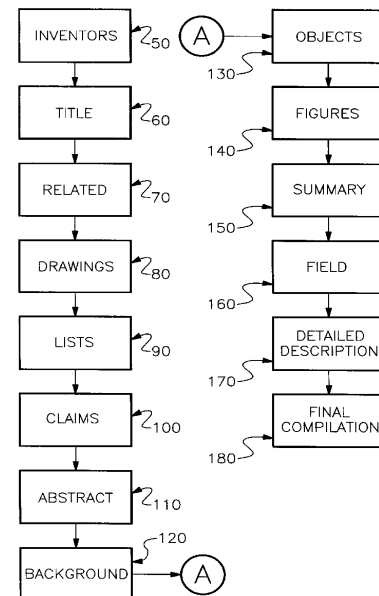
Pressman, Software Engineering, A Practioner's Approach,
p. 98-111, 1982.

Primary Examiner—Anton Fetting

ABSTRACT

A machine and method for drafting a patent application has a keyboard, mouse, display, printer, and a computer for receiving and transmitting data. The computer requests and stores information regarding the invention including, if appropriate: 1) qualities and benefits (QAB) of the invention over the prior technology; 2) primary elements (PE) of the invention that define the invention apart from prior technology; 3) secondary elements (SE) of the invention that may be important but not necessary to define over the prior technology; and 4) substitute elements (SUB) of the invention that may substituted or modified in an effort to avoid the primary and secondary elements but not depart from the invention. The QAB are requested and stored before the objects of the invention are drafted, the PE are requested and stored before the independent claims are drafted, the SE and SUB are requested and stored before the dependent claims are drafted, the independent claims are drafted before the summary of the invention is drafted, the independent claims are drafted before the dependent claims are drafted, the dependent claims are drafted before the abstract of the disclosure is drafted, and all claims are drafted before the detailed description of a preferred embodiment is drafted. The sections are drafted in a predetermined order prohibiting jumping ahead to draft a later section. At many sections, initial draft text, examples, samples, legal material, etc. are available to the user. A final patent application is compiled by combining the drafted sections with predetermined text.

18 Claims, 4 Drawing Sheets



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

(10) **Patent No.: US 6,329,919 B1**
(45) **Date of Patent: Dec. 11, 2001**

(54) **SYSTEM AND METHOD FOR PROVIDING
RESERVATIONS FOR RESTROOM USE**

(75) Inventors: **Stephen J. Boies**, Mahopac, NY (US);
Samuel Dinkin, Austin, TX (US); **Paul
Andrew Moskowitz**, Yorktown Heights;
Philip Shi-Lung Yu, Chappaqua, both
of NY (US)

(73) Assignee: **International Business Machines
Corporation**, Armonk, NY (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.: **09/639,254**

(22) Filed: **Aug. 14, 2000**

(51) **Int. Cl.⁷** **G08B 23/00**

(52) **U.S. Cl.** **340/573.1; 340/825.28;**
340/825.29; 705/5; 705/6

(58) **Field of Search** 340/539, 573.1,
340/540, 531, 825.28, 825.29; 705/5, 6;
701/201; 707/100; 395/205

(56) **References Cited**

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5,864,818	*	1/1999	Feldman	395/205
5,948,040	*	9/1999	DeLormet et al.	701/201
5,963,948	*	10/1999	Shilerat	707/100
5,978,770	*	11/1999	Waytena et al.	705/5

* cited by examiner

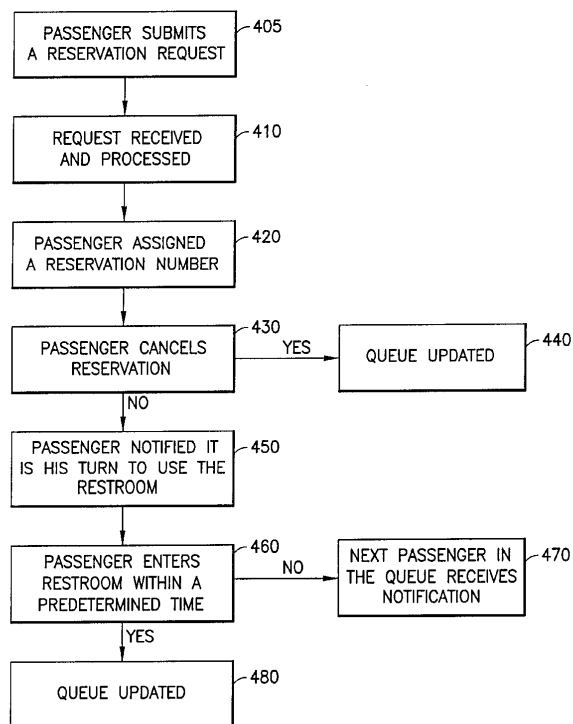
Primary Examiner—Benjamin C. Lee

(74) *Attorney, Agent, or Firm*—Morgan & Finnegan, L.L.P.

(57) **ABSTRACT**

The present invention is an apparatus, system, and method for providing reservations for restroom use. In one embodiment, a passenger on an airplane may submit a reservation request to the system for restroom use. The reservation system determines when the request can be accommodated and notifies the passenger when a restroom becomes available. The system improves airline safety by minimizing the time passengers spent standing while an airplane is in flight.

64 Claims, 4 Drawing Sheets



[54] HYPER-LIGHT-SPEED ANTENNA

[76] Inventor: David L. Strom, 1615 Geneva St.,
Aurora, Colo. 80010

[21] Appl. No.: 08/942,824

[22] Filed: Oct. 2, 1997

Related U.S. Application Data

[60] Provisional application No. 60/028,204, Oct. 2, 1996.

[51] Int. Cl.⁷ H01Q 1/32

[52] U.S. Cl. 343/787; 343/711; 343/721;
343/895

[58] Field of Search 343/711, 713,
343/721, 725, 787, 788, 895

[56] References Cited

U.S. PATENT DOCUMENTS

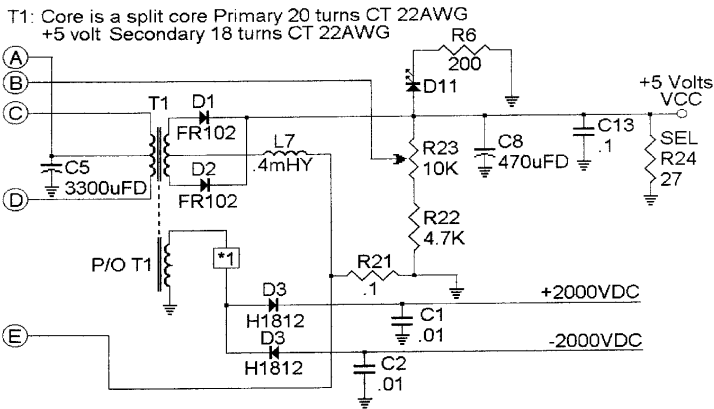
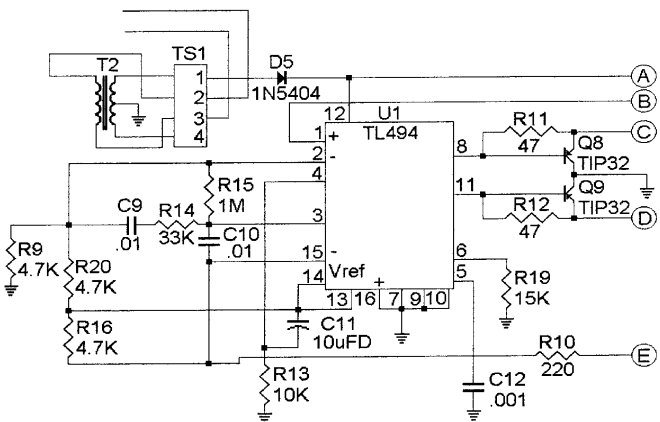
5,714,959 2/1998 Troy et al. 343/713

Primary Examiner—Don Wong
Assistant Examiner—James Clinger
Attorney, Agent, or Firm—Rick Martin

[57] ABSTRACT

A method to transmit and receive electromagnetic waves which comprises generating opposing magnetic fields having a plane of maximum force running perpendicular to a longitudinal axis of the magnetic field; generating a heat source along an axis parallel to the longitudinal axis of the magnetic field; generating an accelerator parallel to and in close proximity to the heat source, thereby creating an input and output port; and generating a communications signal into the input and output port, thereby sending the signal at a speed faster than light.

30 Claims, 14 Drawing Sheets



Hyper-light-speed antenna

- All known radio transmissions use known models of time and space dimensions for sending the RF signal.

The present invention has discovered the apparent existence of a **new dimension** capable of acting as a medium for RE signals. **Initial benefits** of penetrating this new dimension include sending RF signals faster than the speed of light, extending the effective distance of RF transmitters at the same power radiated, penetrating known RF shielding devices, and **accelerating plant growth** exposed to the by-product energy of the RF transmissions.

... The present invention takes a transmission of energy, and **instead of sending it through normal time and space**, it **pokes a small hole into another dimension, thus**, sending the energy through a place which allows transmission of energy to exceed the speed of light.

Hyper-light-speed antenna-claim

- 1. A method to transmit and receive electromagnetic waves comprising:
 - generating opposing magnetic fields each having a plane of maximum force running perpendicular to a longitudinal axis of the respective magnetic field;
 - generating heat from a heat source along an axis parallel to the longitudinal axis of the magnetic field;
 - generating an accelerator parallel to and in close proximity to the heat source, thereby creating an electromagnetic injection point; and
 - generating a communication signal into the electromagnetic injection point, **thereby sending and receiving the communication signal at a speed faster than a known speed of light.**



Flip-down door.



FIG.2B

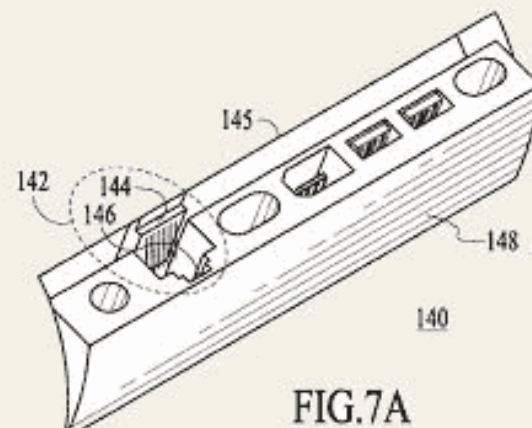
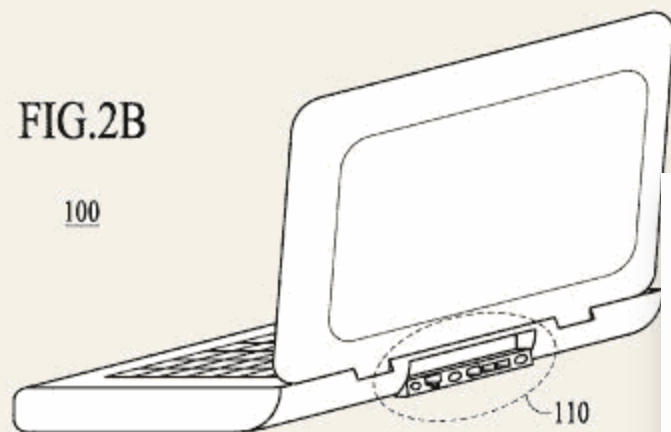


FIG.7A

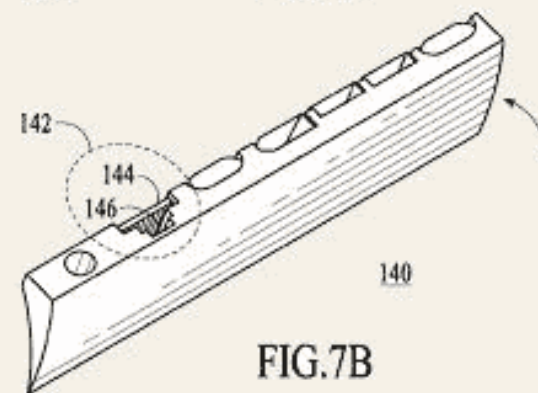
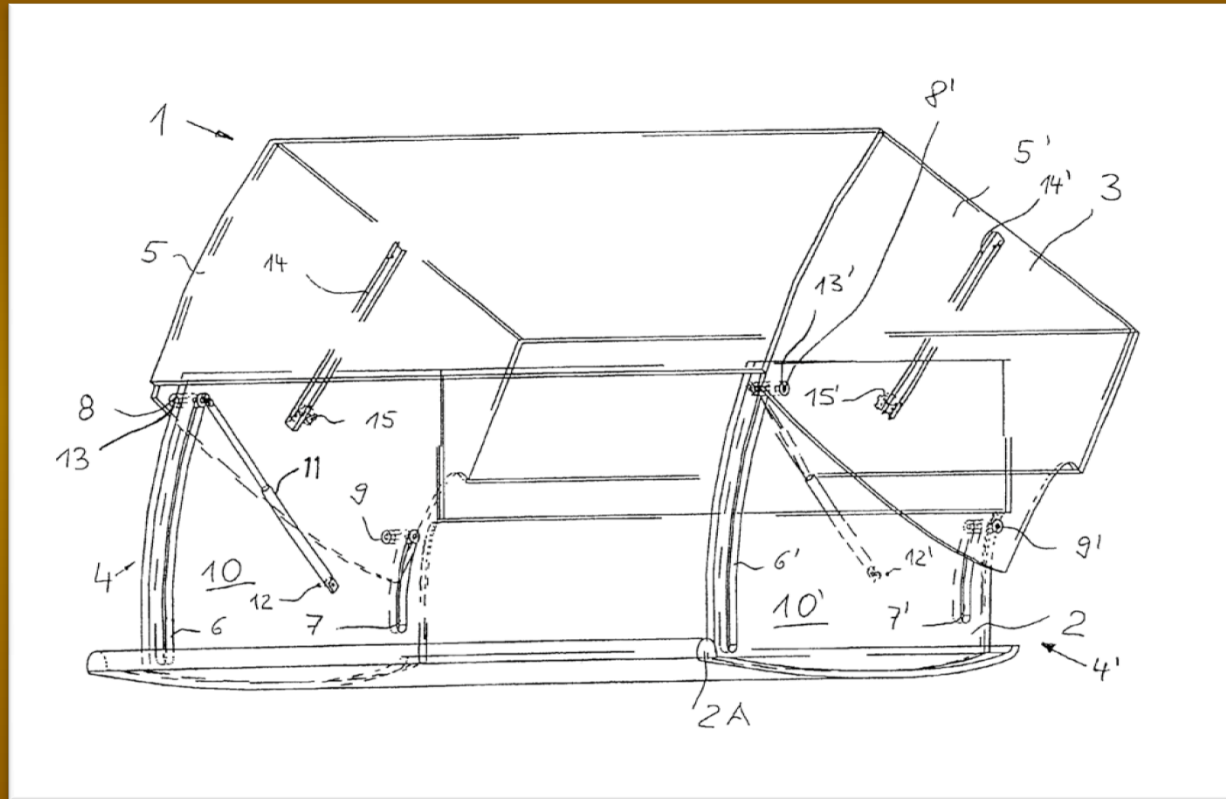


FIG.7B





United States Patent [19]
Lyons

[11] **Patent Number:** **5,163,447**
[45] **Date of Patent:** **Nov. 17, 1992**

[54] **FORCE-SENSITIVE, SOUND-PLAYING
CONDOM**

[76] **Inventor:** **Paul Lyons**, 295 Elm St.,
Southbridge, Mass. 01550-3009

[21] **Appl. No.:** **728,607**

[22] **Filed:** **Jul. 11, 1991**

[51] **Int. Cl.⁵** **A61F 6/04**

[52] **U.S. Cl.** **128/844; 128/883;**
446/220

[58] **Field of Search** 128/842, 844, 885, 886,
128/883, 884; 604/347-353; 446/220-226, 404

[56] **References Cited**

U.S. PATENT DOCUMENTS

494,436 3/1893 Orth 128/883
745,264 11/1903 Todd 128/886 X

FOREIGN PATENT DOCUMENTS

680088 10/1952 United Kingdom 128/886
2036560 7/1980 United Kingdom .

OTHER PUBLICATIONS

Frederick's of Hollywood, catalog, vol. 70, Issue 356,
Version 0600, ©1990, p. 68: "Wedding Surprise".

Primary Examiner—Robert A. Hafer

Assistant Examiner—David J. Kenealy

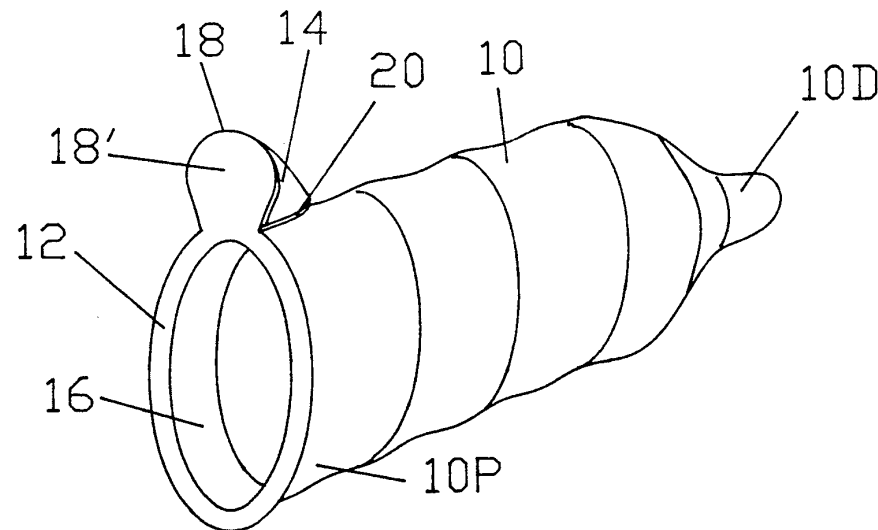
Attorney, Agent, or Firm—David Pressman

[57]

ABSTRACT

A force-sensitive sound-playing condom comprising: a condom body (10) having a distal end and a proximal end, and a miniature force-sensitive sound-playing unit (14) attached to the condom at its proximal end. The proximal end of the condom is made in the form of a semirigid rim (12) having a lower part with an opening (16) coinciding with the cavity of the condom, and an upper part extending radially upwardly from the body of the condom and supporting the sound-playing unit (14). The latter contains a chip-controlled piezoelectric sound transducer which plays a melody or voiced message when during intercourse the contacts (28 and 30) of the sound-playing unit (14) are closed and the transducer is activated.

19 Claims, 1 Drawing Sheet



More ridiculous patents ...

- Amazon's "one-click" patent, asserted against rival Barnes & Noble;
- Cendant's patent, asserted against **Amazon**, for violating Cendant's patent on **recommending books to customers**;
- Bush's Top Economist Seeks Patent on His Own Tax Strategy – patent application for a System And Method For Multi-State Tax Analysis, which claims "A method, comprising: creating one or more alternate entity structures based on a base entity structure, the base entity structure comprising one or more entities; determining a tax liability for each alternate entity structure and the base entity structure; and generating a result based on comparing each of the determined tax liabilities."
- Apple's patent application for digital Karaoke;

More ridiculous patents ... (cont'd)

- the suit against Facebook re patent for “System for creating a community for users with common interests to interact in”;
- “absurdly broad patent [issued to Blackboard] for common uses of technology if that technology is employed in the context of education”;
- Compton’s (now Encyclopedia Britannica’s) patent that “broadly cover[s] any multimedia database allowing users to simultaneously search for text, graphics, and sounds—basic features found in virtually every multimedia product on the market”;
- Acacia’s patent for putting a unique transaction number on a receipt (Acacia has collected settlement amounts—rumored to be between \$50K and \$400K each—from a very long list of licensees)

More ridiculous patents ... (cont'd)

- The Supreme Court in the 1882 case *Atlantic Works v. Brady* lists examples of patents issued to “gadgets that obviously have had no place in the constitutional scheme of advancing scientific knowledge... the simplest of devices”. These included:
 - Doorknob made of clay rather than metal or wood, where different shaped doorknobs had previously been made of clay;
 - Rubber caps put on wood pencils to serve as erasers;
 - Making collars of parchment paper where linen paper and linen had previously been used;
 - A method for preserving fish by freezing them in a container operating in the same manner as an ice cream freezer;

More ridiculous patents ... (cont'd)

- More from *Atlantic Works v. Brady*:
 - Inserting a piece of rubber in a slot in the end of a wood pencil to serve as an eraser;
 - A stamp for impressing initials in the side of a plug of tobacco;
 - A hose reel of large diameter so that water may flow through hose while it is wound on the reel.
 - Putting rollers on a machine to make it movable;
 - Using flat cord instead of round cord for the loop at the end of suspenders;
 - Placing rubber hand grips on bicycle handlebars;
 - An oval rather than cylindrical toilet paper roll, to facilitate tearing off strips.

Patent Suits and Awards

- As of March 2003, the top 5 patent infringement damage awards ranged from \$873 million (*Polaroid v. Kodak*, 1991) to \$204.8 million (*Hughes Tool v. Smith International*, 1986).
 - The top 5 patent settlements ranged from \$1 billion to \$300 million.
 - Sadly, a \$200 million verdict seems normal nowadays.
 - The recent \$156 million patent infringement verdict against AT&T—which could possibly be trebled by the judge—now looks like small potatoes.

Patent Suits and Awards (cont'd)

- Qualcomm has been enjoined from importing chips that help conserve power in cellphones
- \$432 Million Verdict in Marshall Texas Patent Case: New Jersey doctor awarded \$432 Million as a reasonable royalty against Boston Scientific for infringing his "Method and Apparatus for Managing Macromolecular Distribution";
- Smartphones Patented... Just About Everyone Sued 1 Minute After Patent Issued, *Techdirt* (Jan. 24, 2008);
- Farmer David Reaps What He Has Sown: A Patent Suit: even though "the practice of savings seeds after a harvest to plant the next season is as old as farming itself," patents prevent farmers from saving patented seeds;
- Apple, Starbucks sued over custom music gift cards (Utah couple sue Apple and Starbucks over 'Song of the Day' promotion, which offers Starbucks customers a iTunes gift card for a complimentary, pre-selected song download, based on a patent on "retail point of sale for online merchandising" which allows customers to buy a gift card from brick-and-mortar stores and then go home and redeem the card online);
- Apple Sued Over Caller ID On The iPhone (patent on matching up the phone number of an incoming call with a local contact database to display who is calling)

Patent Suits and Awards (cont'd)

- New 802.11n Wi-Fi standard (which promises to significantly increase Wi-Fi speed and range) in jeopardy due to patent threats;
- SanDisk Sues 25 Companies for Patent Infringement ("Suits have been filed against 25 companies by the SanDisk corporation this week, as the company looks to stop businesses from shipping products it alleges are infringing on its work. SanDisk has filed suits against everyone from MP3 player manufacturers to USB hard drive creators. The list of defendants is staggering, and MacWorld notes if Sandisk succeeds it could have repercussions outside of the courtroom. ... The court ... complaints could affect the prices and availability of products made by companies targeted in the suit if SanDisk wins and the companies are barred from importing products into the U.S");
- Patent Office upholds Tivo's "time warp" patent, EchoStar not so happy (Tivo's patent for "time warp" DVR technology threatening competitor Echostar);
- U R SUED: Patent holding company targets 131 companies over SMS patents, *ars technica* (Nov. 13, 2007);
- The International Trade Commission (ITC) may ban imports of many popular hard drives that "are alleged to infringe on patents owned by California residents Steven and Mary Reiber related to a 'Dissipative ceramic bonding tool tip'";

Patent Suits and Awards (cont'd)

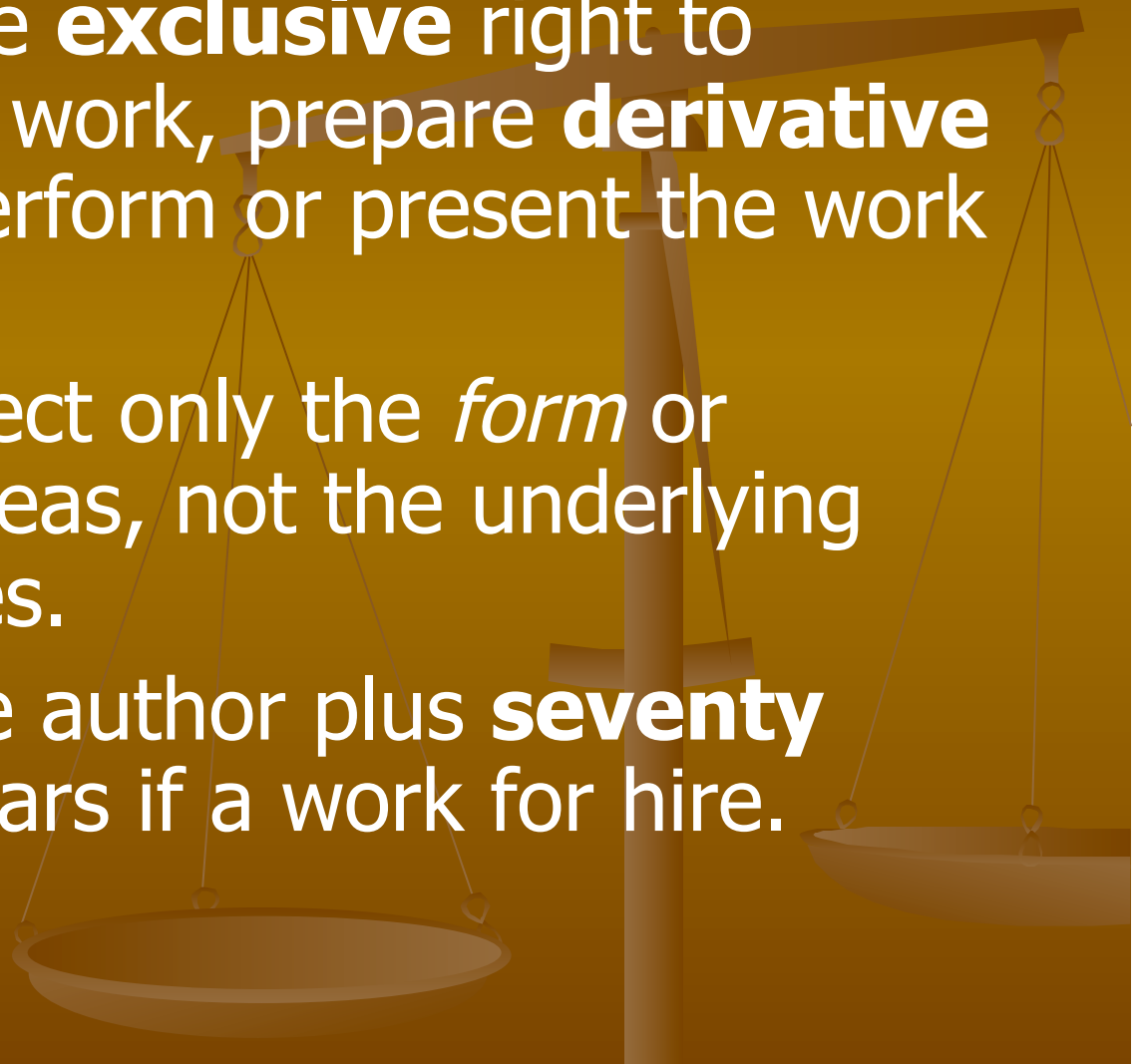
- VoIP phone service Vonage may be put out of business by patents. Sprint recently won a patent case against Vonage in which \$69.5 million was awarded in damages. Sprint had planned "to ask the court to permanently ban Vonage from using its patented technology," but the case was subsequently settled for \$80 million.
 - However, in a separate patent lawsuit between Verizon and Vonage, the jury found that Vonage had violated three Verizon patents, and awarded Verizon \$58 million in damages plus ongoing royalties;
- Revolutionary Television Design Killed by Patents (2007)
SED televisions delayed, again -- possibly forever: another SED television delay: Canon and Toshiba recently announced the postponement of the "late 2007" launch of their SED televisions citing the prolonged patent lawsuit with Nano-Proprietary as the reason.
 - Not only has the litigation delayed the launch of Toshiba's 55-incher with 100,000:1 contrast, Canon also announced that they've stopped work on the technologies required to bring production costs down to that of LCDs and plasmas.
- BlackBerry's manufacturer, RIM, was forced to cough up **\$612.5 million** after NTP used patent law to threaten to shut RIM down;
- Microsoft was on the receiving end of a **\$1.5 billion** jury verdict for infringing an MP3 patent held by Alcatel-Lucent (which was recently overturned);

Patent Suits and Awards (cont'd)

- After Kodak sought more than \$1 billion in damages from Sun Microsystems for patent infringement, Kodak finally settled for **\$92M** (the verdict resulted “in the immediate shut-down of Kodak’s entire instant photography division, with the immediate loss of 800 jobs. And, some say, the eventual failure of Polaroid due to lack of any real competition to keep them on their toes!”);
- Freedom Wireless obtained a **\$150M damages award** against Boston Communications Group, Inc., which at the time had revenues of only about \$100M. Judge refused to stay the injunction issues against BCGI (and by extension, its customers) pending appeal;
- Smith International was forced to pay Hughes Tool Company **\$205.4 million** for infringement upon Hughes’s patent for an “O-ring seal” rock bit, which led to Smith filing for Chapter 11 bankruptcy protection (this was in 1986, when \$200M was considered a large patent verdict).

What is a Copyright?

- Author given the **exclusive** right to **reproduce** the work, prepare **derivative works**, or to perform or present the work publicly.
- Copyrights protect only the *form* or *expression* of ideas, not the underlying ideas themselves.
- Term: life of the author plus **seventy years**, or 95 years if a work for hire.



Copyrights Gone Wild

- RIAA Wants \$1.5 Million Per CD Copied, *Slashdot* (Jan. 30, 2008);
- Ford Slaps Brand Enthusiasts, Returns Love With Legal Punch, *AdRants* (Jan. 14, 2008) (Ford Motor Company claims that they hold the rights to any image of a Ford vehicle, even if it's a picture you took of your own car);
- Jacqueline L. Salmon, NFL Pulls Plug On Big-Screen Church Parties For Super Bowl, *Washington Post* (Feb. 1, 2008) (NFL prohibits churches from having Super Bowl gatherings on TV sets or screens larger than 55 inches);

Copyrights Gone Wild (cont'd)

- Internet pirates could be banned from web, Telegraph (Feb. 12, 2008) (British proposal to punish individuals who illegally download music by banning them from the Internet);
- Cory Doctorow, Infringement Nation: we are all mega-crooks, *boingboing* (Nov. 17, 2007);
- Court Says You Can Copyright A Cease-And-Desist Letter, *Techdirt* (Jan. 25, 2008);
- \$220k verdict against Jammie Thomas for sharing 24 songs (jury awarded \$9,250 in statutory damages per song for 24 songs; could have been up to \$150,000 per song, or \$3.6M)

Copyrights Gone Wild (cont'd)

- Kinsella, Battling the Copyright Monster, *Mises Blog* (June 19, 2006);
- Kinsella, Copyright Kills Amazing Music Project, *Mises Blog* (Jan. 2, 2008);
- Kinsella, "Fair Use" and Copyright, *Mises Blog* (Aug. 17, 2007);
- Kinsella, Copyrights and Dancing, *Mises Blog* (Feb. 20, 2007);
- Kinsella, The "tolerated use" of copyrighted works, *Mises Blog* (Oct. 27, 2006);
- Kinsella, Copyright and Birthday Cakes, *Mises Blog* (June 16, 2005);
- Kinsella, Heroic Google Fighting Copyright Morass, *Mises Blog* (June 2, 2005);
- Kinsella, Copyright Gone Mad, *Mises Blog* (Apr. 14, 2005);

Copyrights Gone Wild (cont'd)

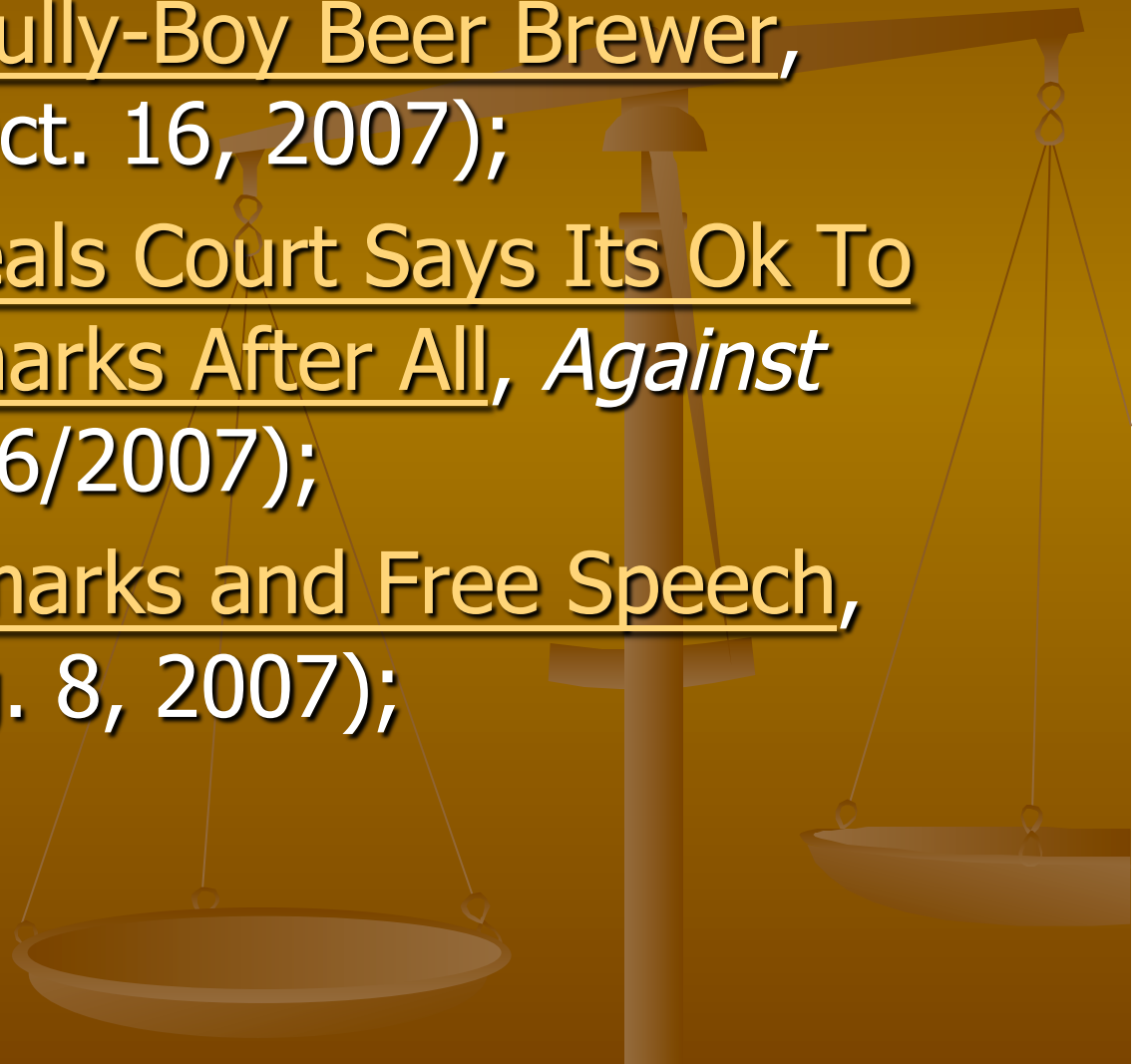
- Kinsella,
Copyright and Freedom of Speech, *Mises Blog* (Nov. 8, 2004).
- For a humorous parody of copyright abuses by the RIAA, see
CD Liner Notes of the Distant Present,
Something Awful (Jan. 3, 2008).





Trademarked Insanity

- Chip Wood, *A Bully-Boy Beer Brewer, Straight Talk* (Oct. 16, 2007);
- 9th Circuit Appeals Court Says Its Ok To Criticize Trademarks After All, Against Monopoly (09/26/2007);
- Kinsella, Trademarks and Free Speech, Mises Blog (Aug. 8, 2007);



Trademarked Insanity (cont'd)

- Kinsella, Beemer must be next... (BMW, Trademarks, and the letter "M"), *Mises Blog* (Mar. 20, 2007);
- Kinsella, Hypocritical Apple (Trademark), *Mises Blog* (Jan. 11, 2007);
- ECJ: "Parmesian" Infringes PDO for "Parmigiano Reggiano", *I/P Updates* (Feb. 27, 2008).

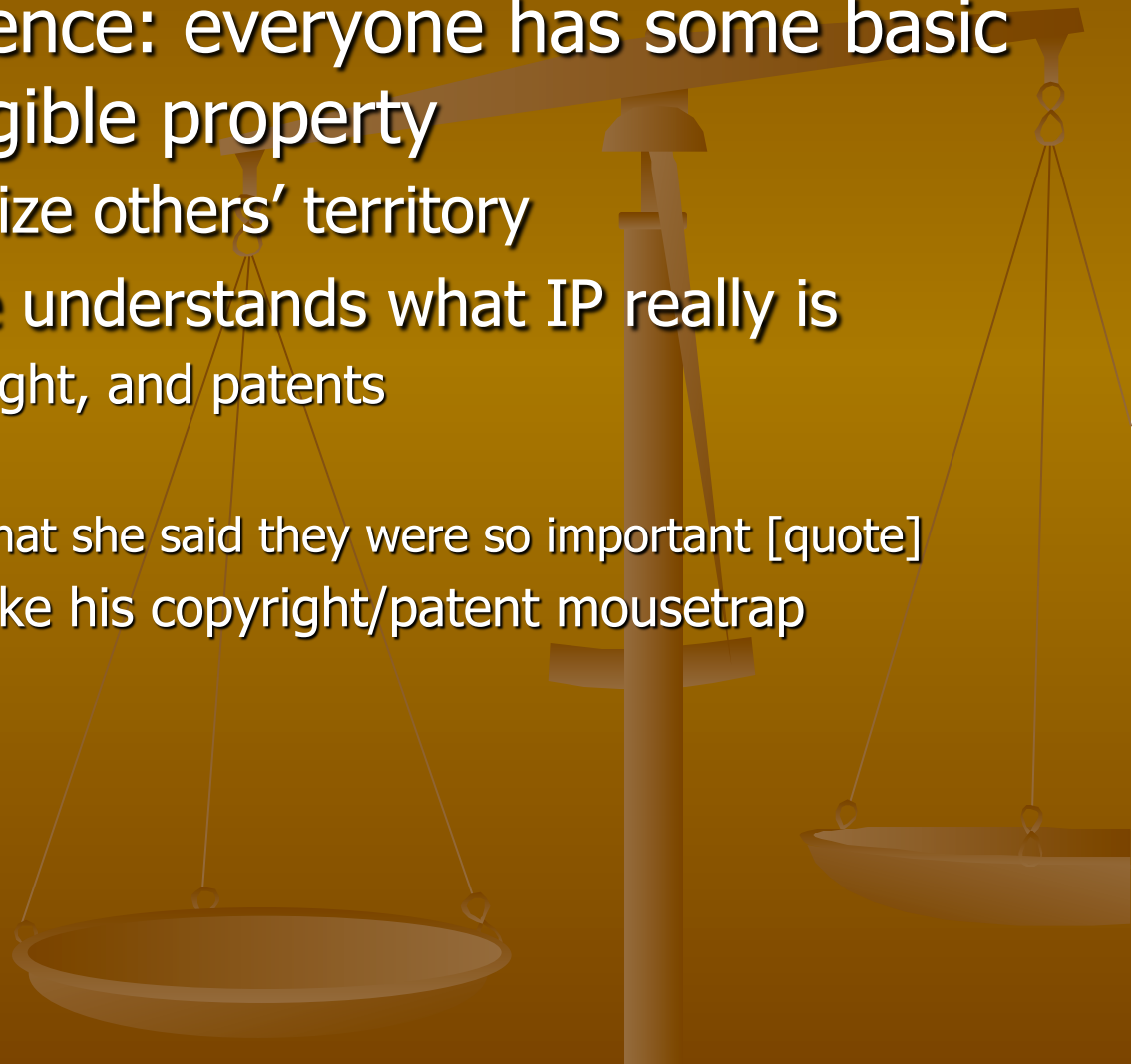
Differences Between IP and Property

- List some



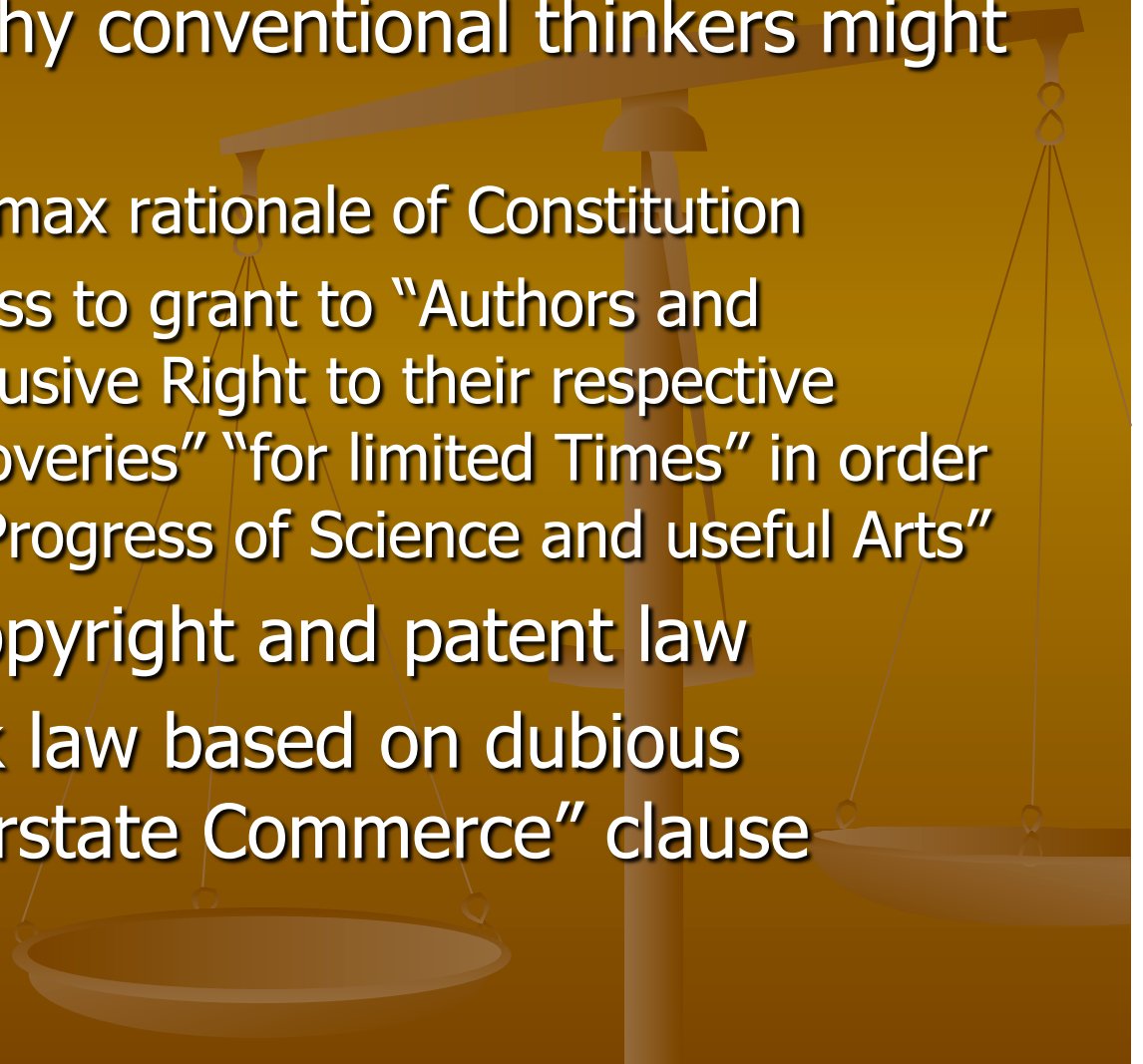
Differences-IP v. Property (cont.)

- Another big difference: everyone has some basic notions about tangible property
 - Even Dogs recognize others' territory
 - But almost no one understands what IP really is
 - Trademark, copyright, and patents
 - Rand's confusion
 - Strange given that she said they were so important [quote]
 - Even Rothbard: take his copyright/patent mousetrap example



Constitutional Utilitarianism

- Understandable why conventional thinkers might favor IP
 - Utilitarian/wealth-max rationale of Constitution
 - authorizes Congress to grant to “Authors and Inventors the exclusive Right to their respective Writings and Discoveries” “for limited Times” in order “To promote the Progress of Science and useful Arts”
- Basis of federal copyright and patent law
- Federal trademark law based on dubious extension of “Interstate Commerce” clause



Patent Utility ...

- Machlup, in An Economic Review of the Patent System (a 1958 study): **"No economist, on the basis of present knowledge, could possibly state with certainty that the patent system, as it now operates, confers a net benefit or a net loss upon society.** The best he can do is to **state assumptions** and **make guesses** about the extent to which reality corresponds to these assumptions. ... If one does not know whether a system "as a whole" (in contrast to certain features of it) is good or bad, the safest "policy conclusion" is to "muddle through"--either with it, if one has long lived with it, or without it, if one has lived without it. **If we did not have a patent system, it would be irresponsible, on the basis of our present knowledge of its economic consequences, to recommend instituting one.** But since we have had a patent system for a long time, it would be irresponsible, on the basis of our present knowledge, to recommend abolishing it."

Patent Utility (cont'd)

- French researches Francois Leveque and Yann Meniere of the Ecole des mines de Paris (an engineering university): "The abolition or preservation of intellectual property protection is ... not just a purely theoretical question. To decide on it from an economic viewpoint, we must be able to assess all the consequences of protection and determine whether the total favorable effects for society outweigh the total negative effects. Unfortunately, **this exercise [an economic analysis of the cost and benefits of intellectual property] is no more within our reach today than it was in Machlup's day [1950s].**"

Patent Utility (cont'd)

- Boston University Law School Professors (and economists) Michael Meurer and Jim Bessen: "the pair has compiled a tremendous amount of economic data regarding patents and companies who patent. ... Meurer & Bessen's bottom line: On average, the patent system is bad for innovation. They agree innovator firms often profit from their own patents. However, the pair's data shows that the innovator firms are also the ones most likely to be targeted by other patent holders. (litigation, licensing, etc.) In today's system, they find, the disincentives created by other people's patents outweighs the incentives to build your own portfolio. I.e., **on average, the patent system discourages innovation.**"

Patent Utility (cont'd)

- Patents Chilling Effect on Science, report: "The American Association for the Advancement of Science recently conducted a survey on the effect of patenting on the sciences. The results are frightening: 1/5th or more of all research projects in the United States are being chilled by patent holders. The sheer amount of research being canceled because of licensing issues is astounding, but at the same time many of these researchers hold their own patents and therefore contribute to the problem."

Patent Utility (cont'd)

- [Economic historian Eric Schiff] looked at countries that got rid of their patent system (Switzerland and the Netherlands), and found it INCREASED innovation because there was MORE competition in the marketplace. That is companies focused on making more goods for the market, rather than focusing just on patenting things and not having to compete in the market. "Switzerland and the Netherlands eventually adopted patent laws in response to threats from other industrialised nations. This, Schiff argues, was a political decision, not an economic one. It is, he notes, "difficult to avoid the impression" that the absence of patent laws "furthered, rather than hampered development"."

Patent Utility (cont'd)

- Petra Moser found that countries without patent systems innovate just as much, if not more, than those with patent systems. "This paper introduces a new internationally comparable data set that permits an empirical investigation of the effects of patent law on innovation. The data have been constructed from the catalogues of two 19th century world fairs: the Crystal Palace Exhibition in London, 1851, and the Centennial Exhibition in Philadelphia, 1876. They include innovations that were not patented, as well as those that were, and innovations from countries both with and without patent laws. I find no evidence that patent laws increased levels of innovative activity but strong evidence that patent systems influenced the distribution of innovative activity across industries. Inventors in countries without patent laws concentrated in industries where secrecy was effective relative to patents, e.g., food processing and scientific instruments. These results suggest that introducing strong and effective patent laws in countries without patents may have stronger effects on changing the direction of innovative activity than on raising the number of innovations."

Patent Utility (cont'd)

- Jonathan M. Barnett, *Cultivating the Genetic Commons: Imperfect Patent Protection and the Network Model of Innovation*, 37 *U. San Diego L. Rev.* 987, 1008 (2000) ("There is little determinative empirical evidence to settle theoretical speculation over the optimal scope and duration of patent protection.") (citing D.J. Wright, "Optimal patent breadth and length with costly imitation," 17 *Intl. J. Industrial Org.* 419, 426 (1999));
- Robert P. Merges & Richard R. Nelson, "On the Complex Economics of Patent Scope," 90 *Colum. L. Rev.* 839, 868-870 (1990) (stating that most economic models of patent scope and duration focus on the relation between breadth, duration, and incentives to innovate, without giving serious consideration to the social costs of greater duration and breadth in the form of retarded subsequent improvement));
- Tom W. Bell, *Prediction Markets for Promoting the Progress of Science and the Useful Arts*, 14 *G. Mason L. Rev.* (2006) ("But [patents and copyrights] for the most part stimulate only superficial research in, and development of, the sciences and useful arts; copyrights and patents largely fail to inspire fundamental progress. ... Patents and copyrights promote the progress of the sciences and useful arts only imperfectly. In particular, those statutory inventions do relatively little to promote fundamental research and development");
- Thomas F. Cotter, "Introduction to IP Symposium," 14 *Fla. J. Int'l L.* 147, 149 (2002) ("[E]mpirical studies fail to provide a firm answer to the question of how much of an incentive [to invent] is necessary or, more generally, how the benefits of patent protection compare to the costs.");
- Mark A. Lemley, *Rational Ignorance at the Patent Office*, 95 *Northwestern U. L. Rev.* (2001), at p. 20 & n. 74 ("The patent system intentionally restricts competition in certain technologies to encourage innovation. Doing so imposes a social cost, though the judgment of the patent system is that this cost is outweighed by the benefit to innovation. ... There is a great deal of literature attempting to assess whether that judgment is accurate or not, usually without success. George Priest complained years ago that there was virtually no useful economic evidence addressing the impact of intellectual property. ... Fritz Machlup told Congress that economists had essentially no useful conclusions to draw on the nature of the patent system.");

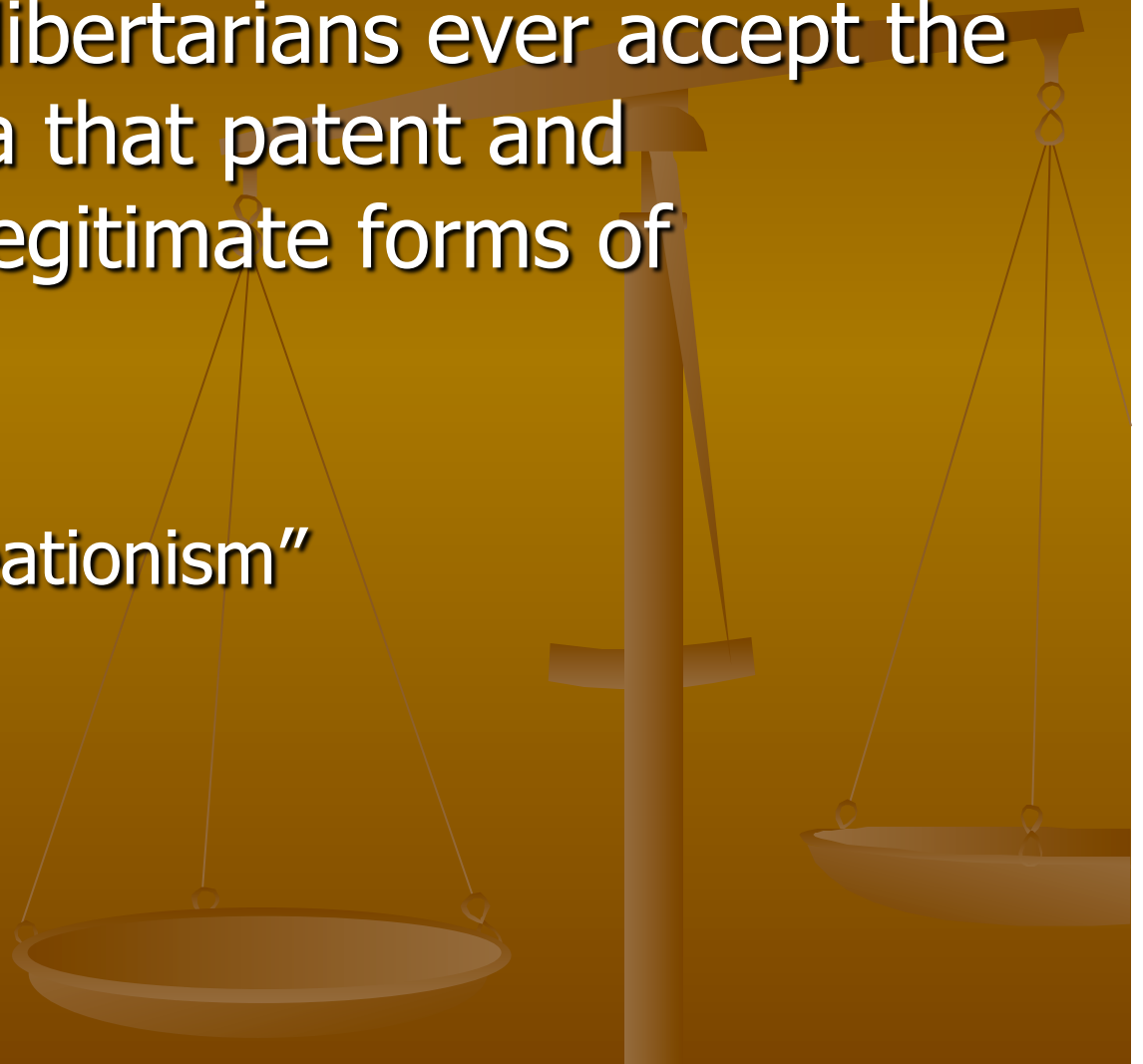
Patent Utility ... (cont'd)

- Julie Turner, Note, "The Nonmanufacturing Patent Owner: Toward a Theory of Efficient Infringement," 86 *Cal. L. Rev.* 179, 186-89 (1998) (Turner is dubious about the efficacy of the patent system as a means of inducing invention, and would argue against having a patent system if this were its only justification);
- F.A. Hayek, *The Fatal Conceit: The Errors of Socialism* (U. Chicago Press, 1989), p. 36 ("The difference between [copyrights and patents] and other kinds of property rights is this: while ownership of material goods guides the use of scarce means to their most important uses, in the case of immaterial goods such as literary productions and technological inventions the ability to produce them is also limited, yet once they have come into existence, they can be indefinitely multiplied and can be made scarce only by law in order to create an inducement to produce such ideas. Yet it is not obvious that such forced scarcity is the most effective way to stimulate the human creative process. I doubt whether there exists a single great work of literature which we would not possess had the author been unable to obtain an exclusive copyright for it; it seems to me that the case for copyright must rest almost entirely on the circumstance that such exceedingly useful works as encyclopedias, dictionaries, textbooks, and other works of reference could not be produced if, once they existed, they could freely be reproduced. ... Similarly, recurrent re-examinations of the problem have not demonstrated that the obtainability of patents of invention actually enhances the flow of new technical knowledge rather than leading to wasteful concentration of research on problems whose solution in the near future can be foreseen and where, in consequence of the law, anyone who hits upon a solution a moment before the next gains the right to its exclusive use for a prolonged period", citing Fritz Machlup, *The Production and Distribution of Knowledge* (1962))..



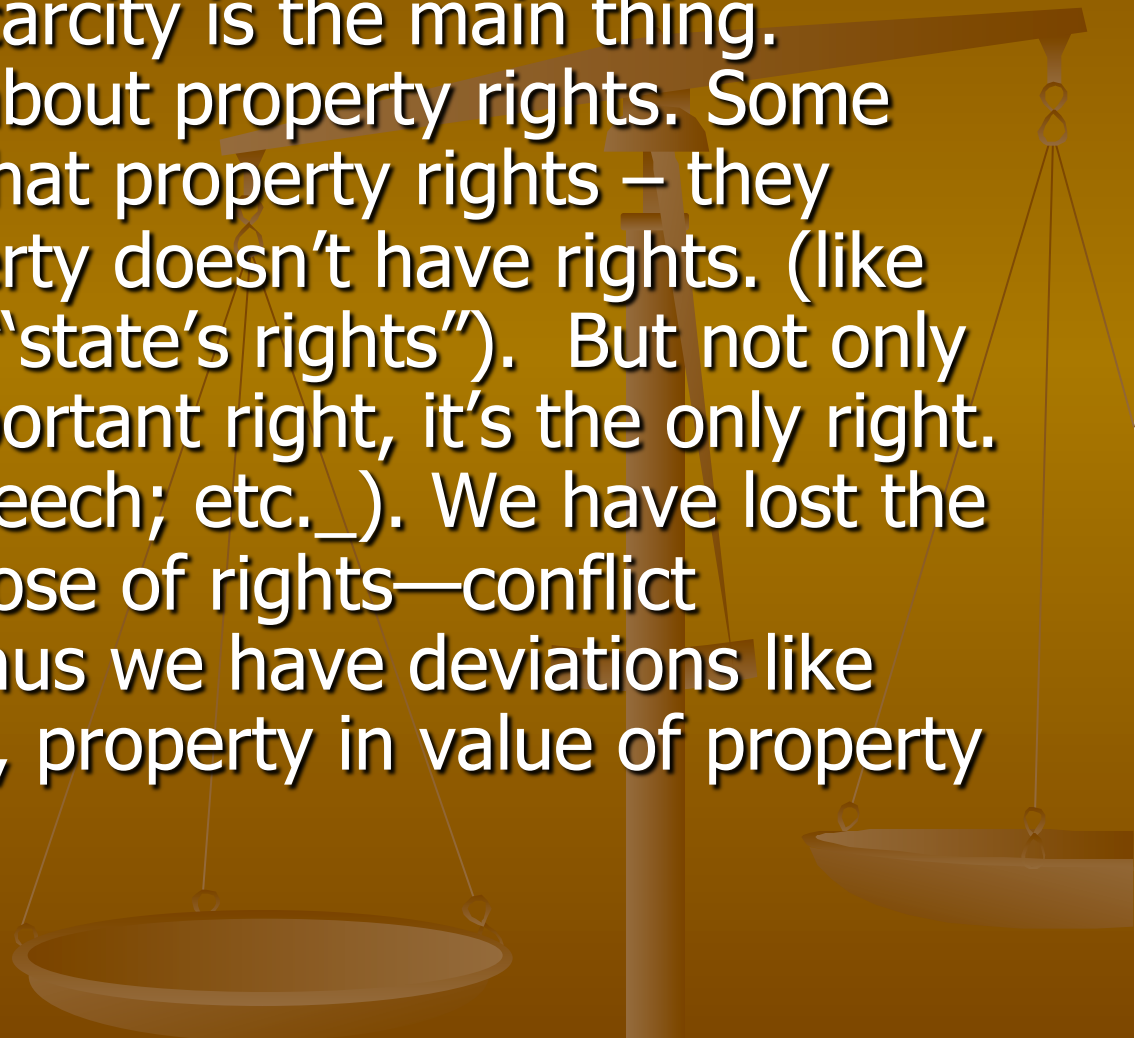
Libertarian Creationism

- But why would libertarians ever accept the nonsensical idea that patent and copyrights are legitimate forms of property?
 - Rand
 - Libertarian "Creationism"
 - Elaborate....



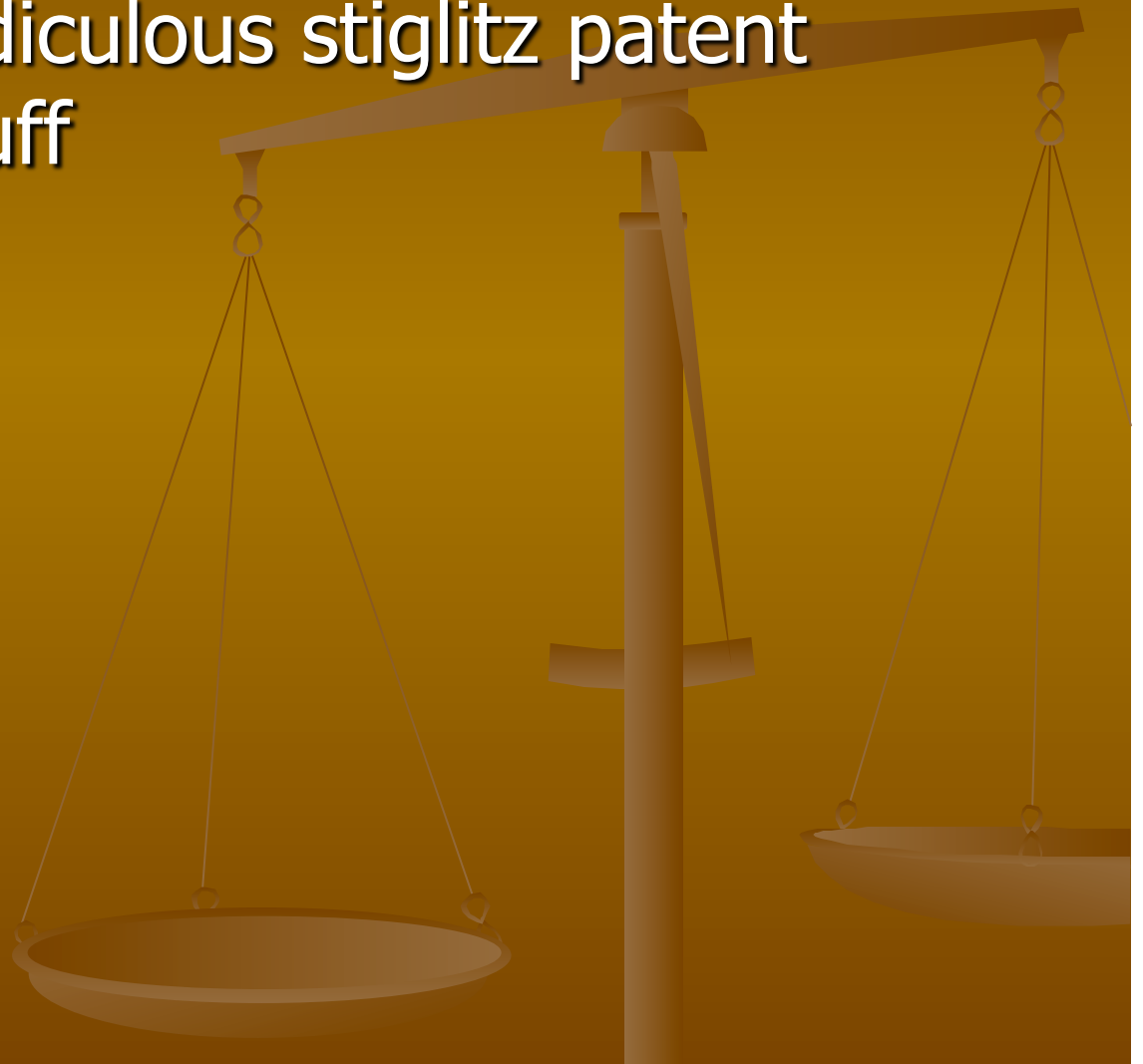
Scarcity and Property Rights

- Talk about how scarcity is the main thing. Libertarianism is about property rights. Some criticize the idea that property rights – they stupidly say property doesn't have rights. (like those who attack "state's rights"). But not only is property an important right, it's the only right. (rothbard; free speech; etc._). We have lost the focus on the purpose of rights—conflict avoidance—and thus we have deviations like creationism, labor, property in value of property (Hoppe), IP.



Dangers of Labor

- Also: cite the ridiculous stiglitz patent award board stuff

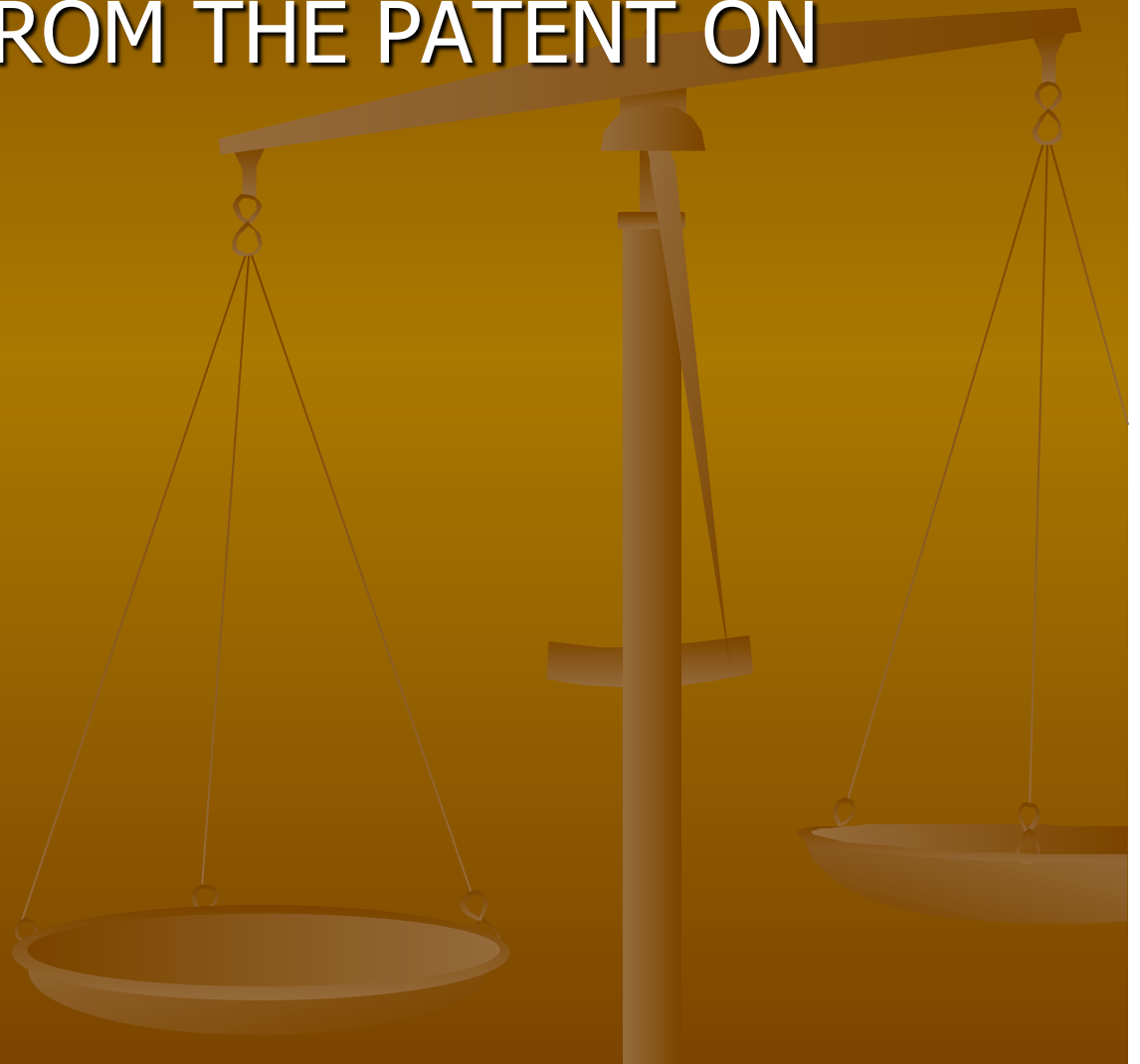


APPARATUS FOR FACILITATING THE BIRTH OF A CHILD BY CENTRIFUGAL FORCE

- Speaking of labor ...



- [ADD FIGURE FROM THE PATENT ON THIS PAGE]



Suggested Reform--Patent

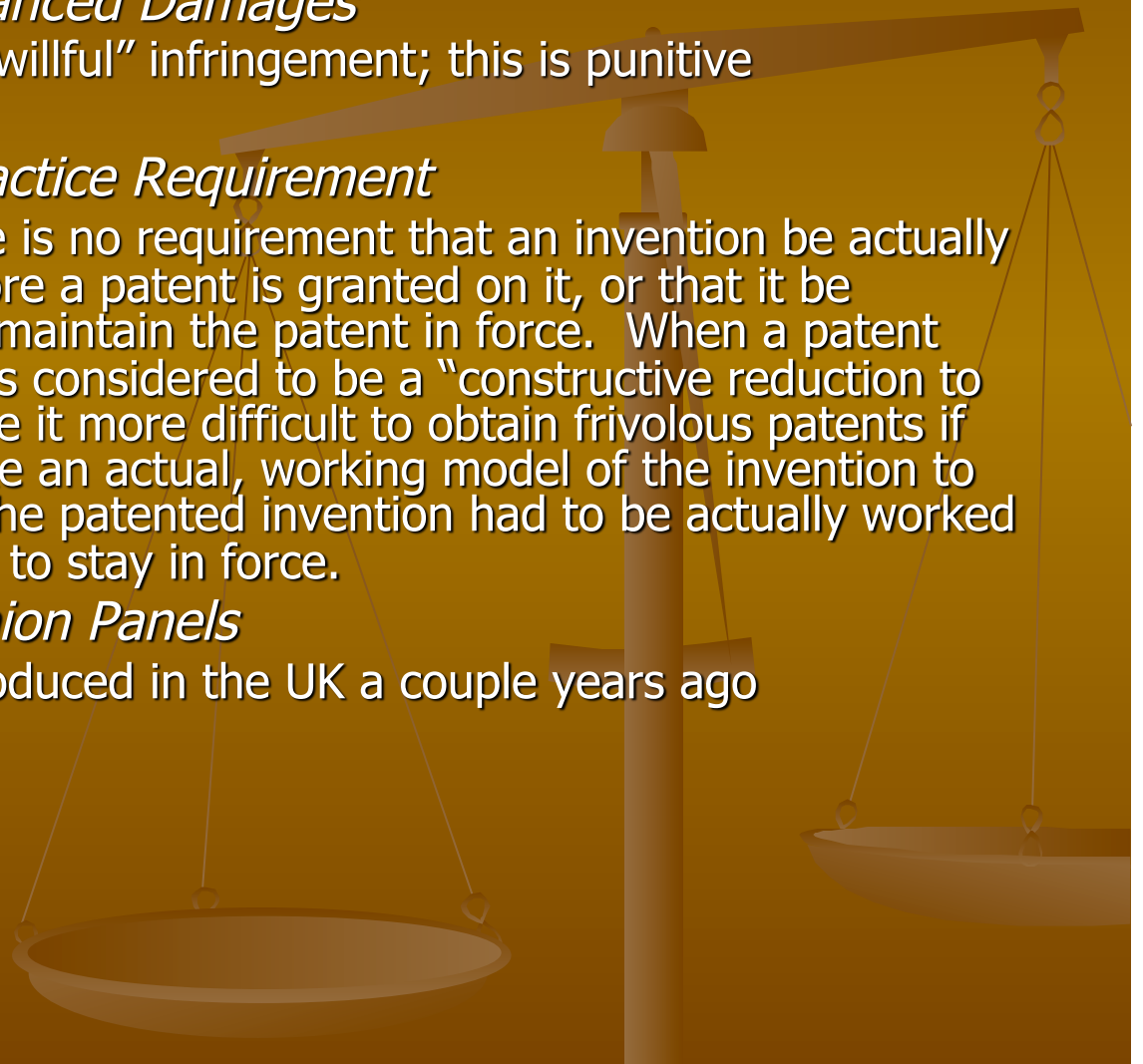
- *Reduce the Patent Term*
 - Now about 17 years
 - Reduce to 5-7 years
 - Amazon CEO Jeff Bezos proposes a 3 to 5 year term for business method and software patents.
- *Remove Patent Injunctions/Provide Compulsory Royalties*
 - Paying royalties is one thing. This is similar to a tax. It impedes, and puts a drag on efficiency. Worse still is the prospect of an injunction which can simply shut a company down. Quite often this is what a competitor will seek. They do not want damages or money: they want to dominate the market and eliminate competition. Or the threat of injunction is used to basically extort money from an alleged infringer (e.g., the \$600 million RIM (BlackBerry) had to pay, even though the patents were under appeal at the PTO, due to the threat of an injunction).
- *Royalty Cap/Safe Harbor*
 - set a cap on the total amount of royalties that any one company would have to pay for compulsory patent royalties for a given product—e.g. 5%
 - if sued by 3 different patentees, pay at most 5% royalties on sales
 - Let patent vultures fight it out.

Suggested Reform—Patent (cont'd)

- *Reduce the Scope of Patentable Subject Matter*
 - Software covered by copyright; exclude software from the scope of patentable subject matter.
 - Eliminate “business methods” patents
 - the most often example given to show that patents are needed is pharmaceuticals
 - So, let’s eliminate patents for anything except pharmaceutical compounds.
- *Provide for Prior Use and Independent Inventor Defenses*
 - Copyright law permits it
 - A defense should be provided for those who are prior users of, or who independently invent, an invention patented by someone else
- *Instantly Publish All Patent Applications*
 - submarine patents (until 1999)
 - “patent bargain”: the state grants a limited monopoly to inventors, in exchange for public disclosure of the invention
 - publication of (most) patent applications at 18 months should be changed to instant publishing with no exceptions
 - would help potential patent defendants by giving them more opportunity to be aware of potential patent threats a year and a half earlier
 - Patent applicants have to reveal their secrets at 18 months anyway, and are the ones requesting a state monopoly to use to sue people, so they have no grounds to complain about having to give a bit more fair notice to their potential victims.

Suggested Reform—Patent (cont'd)

- *Eliminate or Restrict Enhanced Damages*
 - No treble damages for “willful” infringement; this is punitive
 - Actual damages only
- *Working/Reduction to Practice Requirement*
 - Under current law, there is no requirement that an invention be actually reduced to practice before a patent is granted on it, or that it be “worked” after grant to maintain the patent in force. When a patent application is filed, this is considered to be a “constructive reduction to practice.” It would make it more difficult to obtain frivolous patents if the inventor had to make an actual, working model of the invention to obtain a patent; and if the patented invention had to be actually worked or used by the patentee to stay in force.
- *Provide for Advisory Opinion Panels*
 - Similar to approach introduced in the UK a couple years ago
- *Losing Patentee Pays*

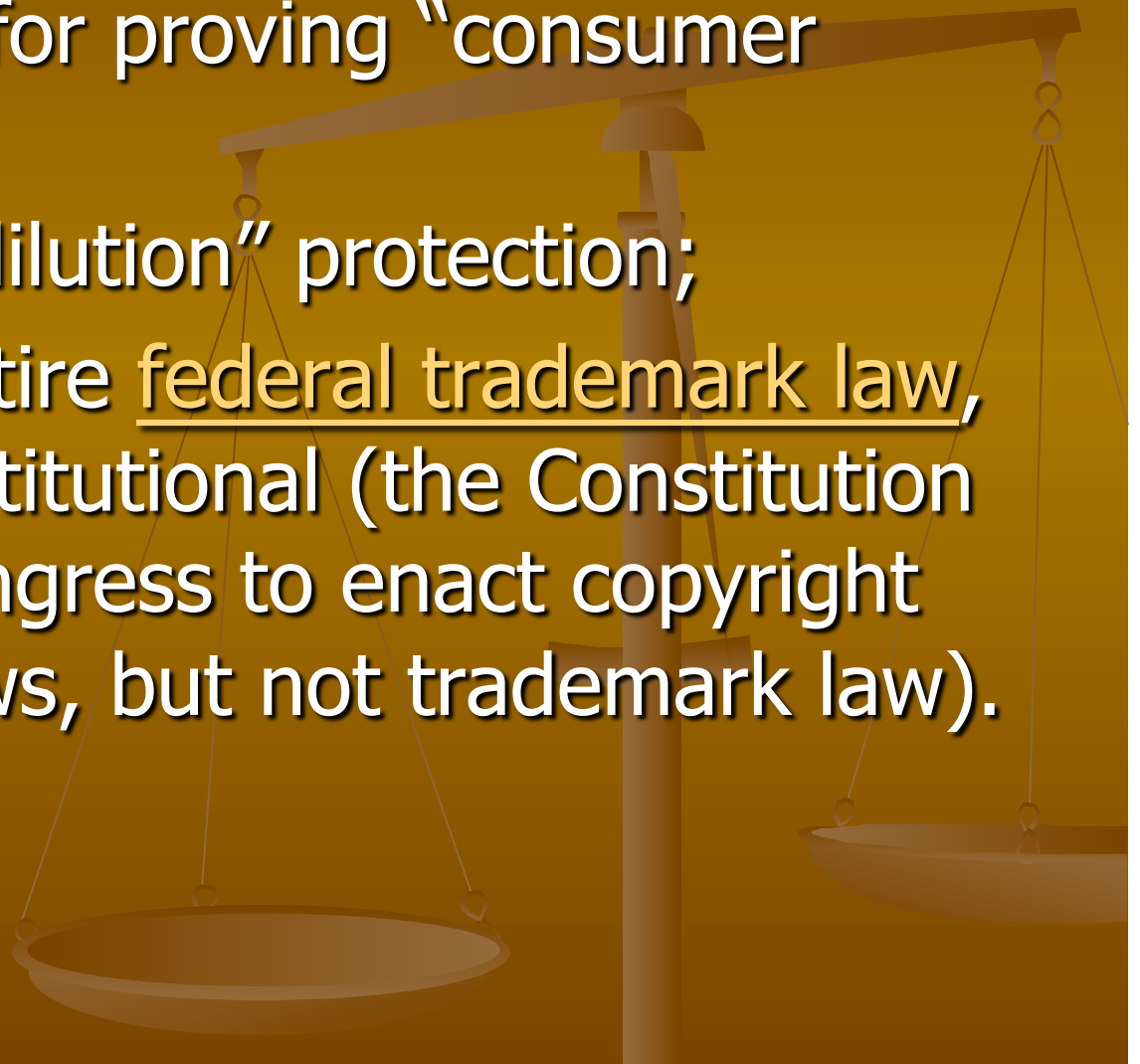


Suggested Reform--Copyright

- Radically reduce the term, from life-plus-70 years to, say, 10 years;
 - Remove software from copyright coverage (it's functional, not expressive);
 - Require active registration and periodic re-registration, for a modest fee, and copyright notice, to maintain copyright (today it is automatic, and it is often impossible to determine, much less locate, the owner), or otherwise make it easier to use "orphaned works";^[i]
 - Eliminate manifestly unjust provisions of the Digital Millenium Copyright Act (DMCA), such as its criminalization of technology than can be used to circumvent digital protection systems;
 - Expand the "fair use" defense and clarify it to remove ambiguity;^[ii]
 - Provide that incidental use (e.g., buildings or sculptures appearing in the background of films) is fair use;
 - Reduce statutory damages.
- ^[i] See Kinsella, Improving Copyright Law: Baby Steps, *Mises Blog* (Feb. 24, 2005).
- ^[ii] See Kinsella, "Fair Use" and Copyright; Kinsella, The "tolerated use" of copyrighted works; Kinsella, Copyright and Birthday Cakes; Kinsella, Heroic Google Fighting Copyright Morass.

Suggested Reform--Trademark

- Raise the bar for proving “consumer confusion”;
- Abolish “anti-dilution” protection;
- abolish the entire federal trademark law, as it is unconstitutional (the Constitution authorizes Congress to enact copyright and patent laws, but not trademark law).



Pattern Privileges

- “Intellectual Property”
 - “Property” question-begging and positive connotations
 - Schulman’s “Logorights”
 - Logos = pattern
 - Too Greek
 - “Rights”: positive connotations
 - Patents cover methods (recipes) and devices (designs): both “patterns”
 - Copyright covers artistic/creative works that have a pattern: music, paintings, writings
 - It’s a state-granted privilege
- 