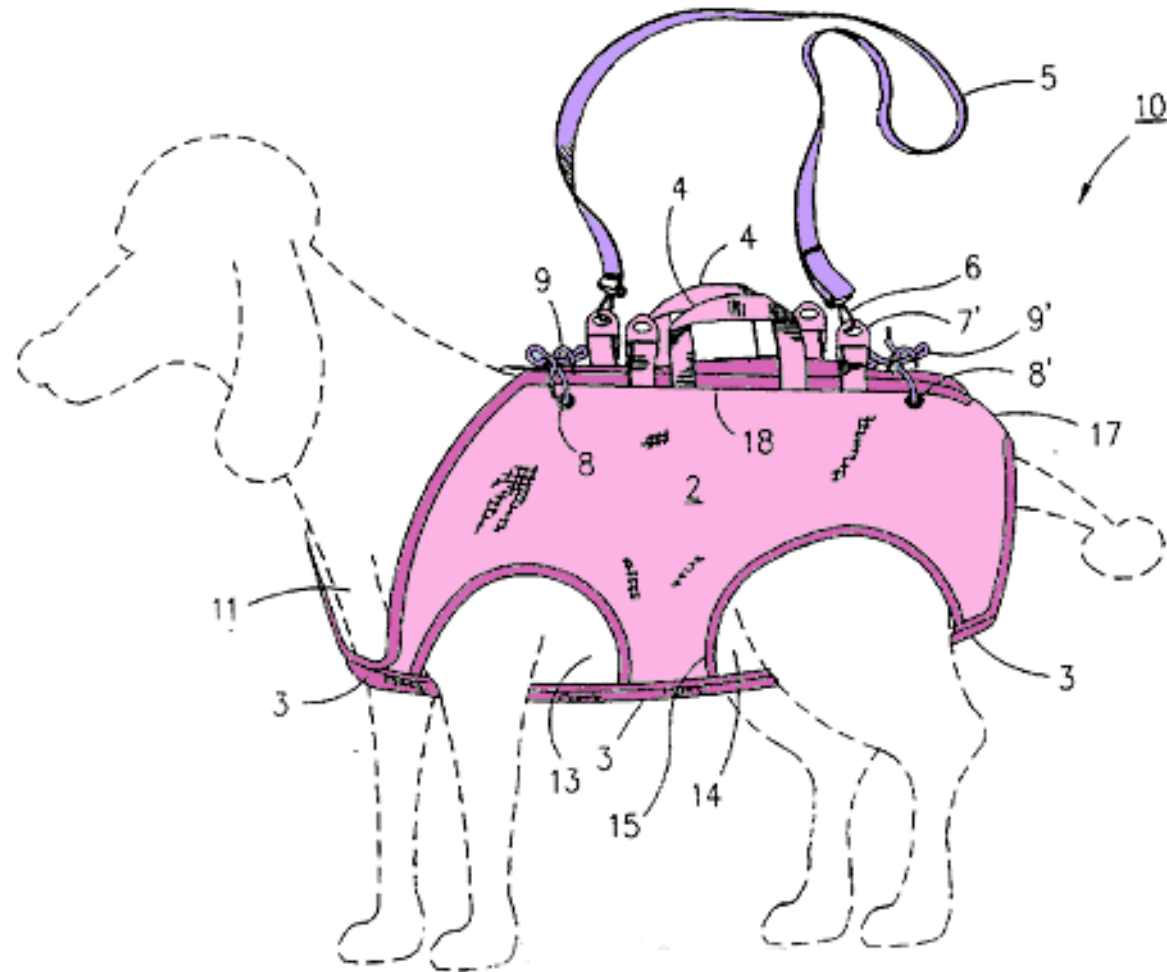


Patenting Basics



"You should get a patent. Folks are gonna be reinventing this."

[Download from: <http://www.openu.ac.il/openuclub/events.html>]

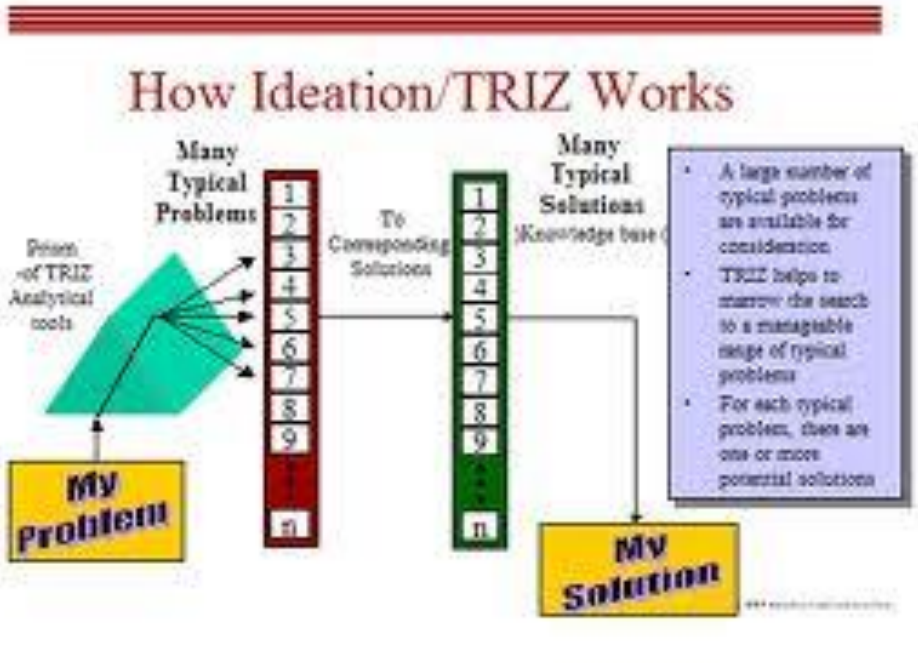


Creativity Techniques

- SIT - Systematic Inventive Thinking
- TRIZ – “*Teoriya Resheniya Izobreatatelskikh Zadatch*”



Genrich Altshuller



Intellectual Property Rights

- **Copyrights**
- **Trademarks**
- **Trade Secrets**
- **Patents**

- » **Plant**
- » **Design**
- » **Utility**



Public Patent Resources

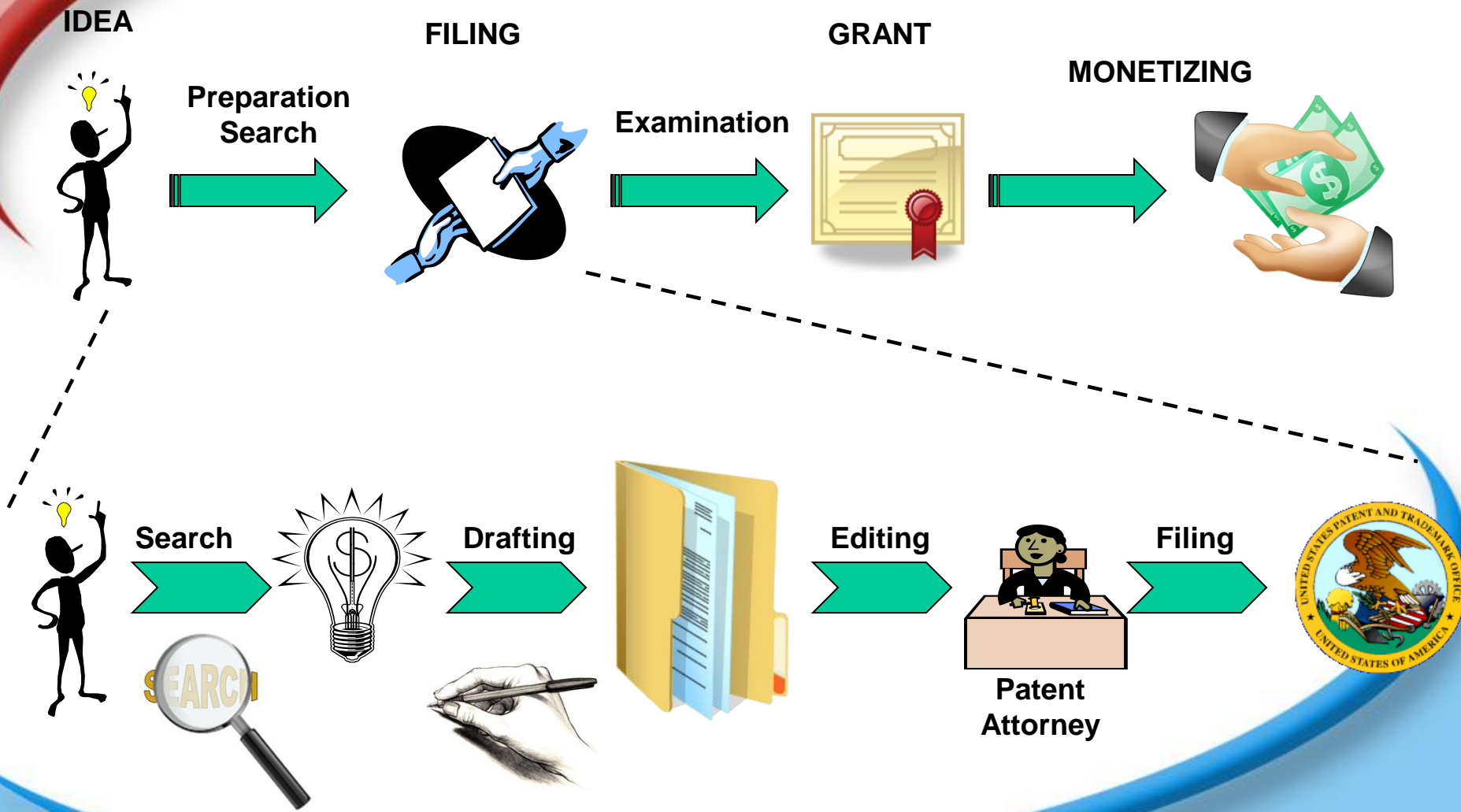
- www.google.com/patents
- www.uspto.gov
- www.pat2pdf.org
- ep.espacenet.com/
- www.patent.gov.uk
- <http://www.justice.gov.il/mojheb/RashamHaPtentim>

Public Patent Resources

- Use as:
 - **Technology data base**
 - **Market intelligence**
 - **Contacts (Business Development, hiring, consulting....)**



Workshop Structure



Search

- **Prior-Art:** Prior art is all information that has been disclosed to the public in any form about an invention before a given date.
- **Search** – To find closest prior art: Structure and benefits.
- Search:
 - Self
 - Search companies
 - Patent attorney

Search Step 1a

- Search Google for:
 - Products with similar structure
 - Products with similar benefits
- For each product, add:
 - Data sheet / brochure / manual describing the product

Search Step 1b

- Search using keywords in <http://www.google.com/patents>:
 - Patents with similar structure
 - Patents with similar benefits
- Make a list of patents / patent applications.

Public Patent Resources

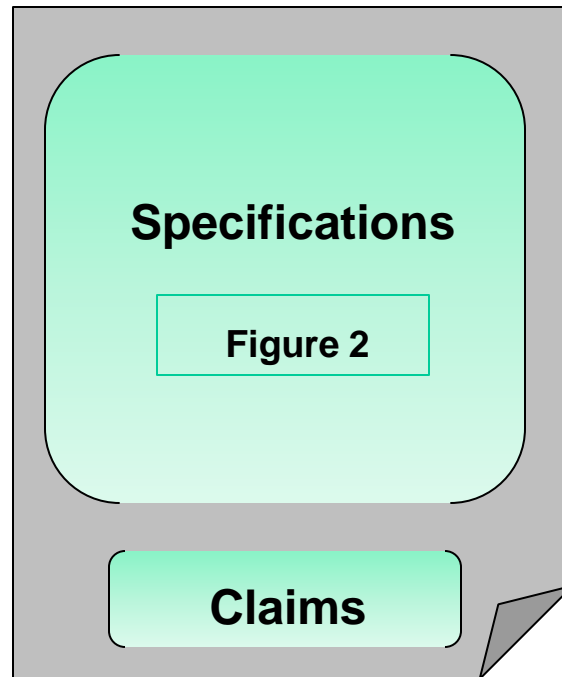
- www.google.com/patents
- www.uspto.gov
- www.pat2pdf.org
- ep.espacenet.com/
- www.patent.gov.uk
- <http://www.ilpatsearch.justice.gov.il/UI/>

Writing Specifications

Basic Guidelines

- Use English, Word and PowerPoint (preferred)
- B&W no colors recommended. Minimum gray levels. Recommended to avoid pictures.
- **More is better.** Nothing can be used against you, all are examples !!!
- Attachment of external public material allowed and recommended.

Utility Patent



Figures 2 - Example

- A block diagram of the “best to explain” example to someone like yourself

Figure 2 - STEPS

- Figure
- Numbering
- Block / connection description
- Story
- Benefits
- Definitions

Figure 2 - STEPS

- **Figure**
 - Numbering
 - Block / connection description
 - Story
 - Benefits
 - Definitions
- 3-7 Blocks preferred. If more, combine or split.
 - Include components 'touching' the invention
 - **No need** for production level description

Figure 2 - General

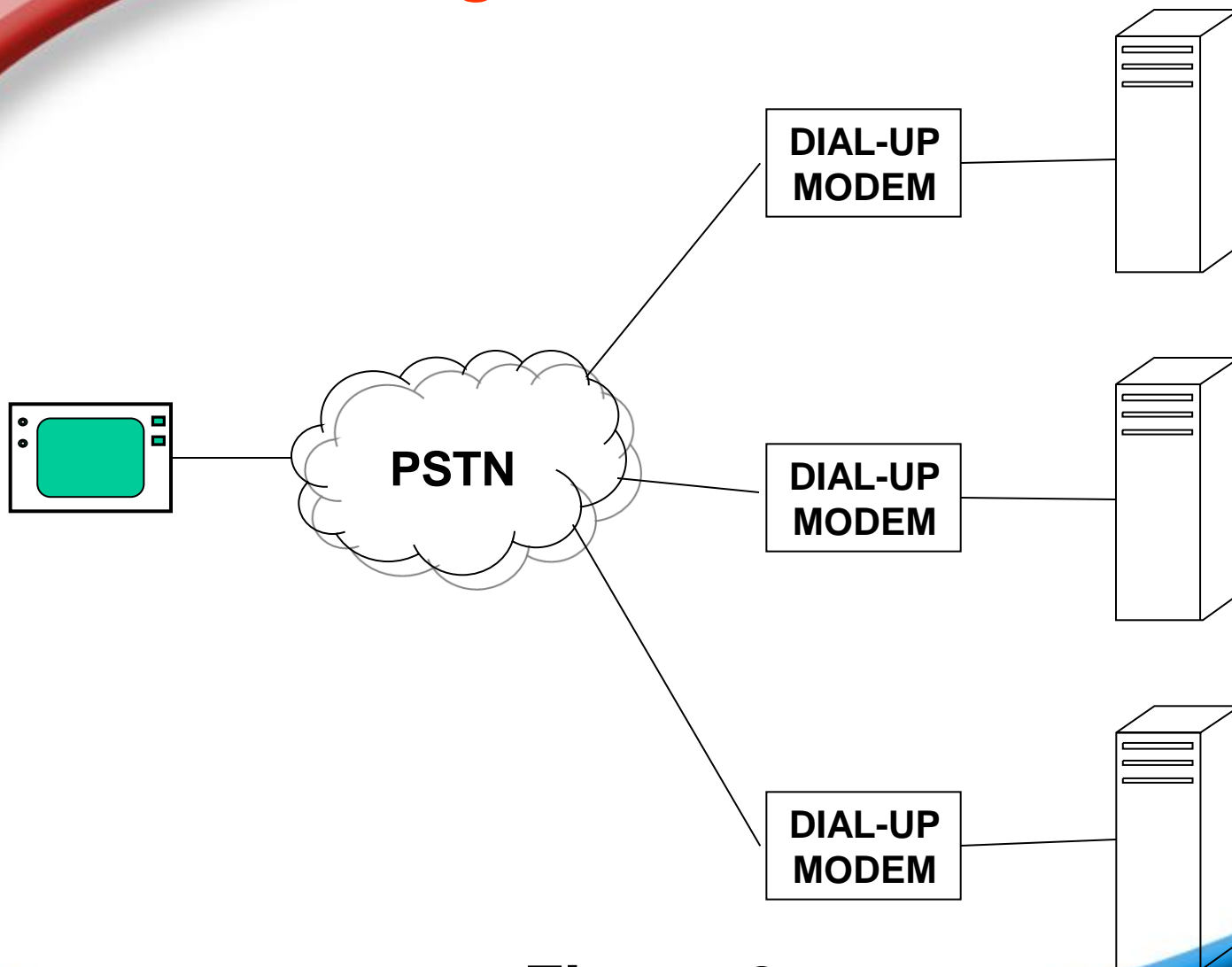


Figure 2

Figure 2 - STEPS

- Figure
 - Numbering
 - Block / connection description
 - Story
 - Benefits
 - Definitions
- Name and number all blocks and connections

Figure 2 - General

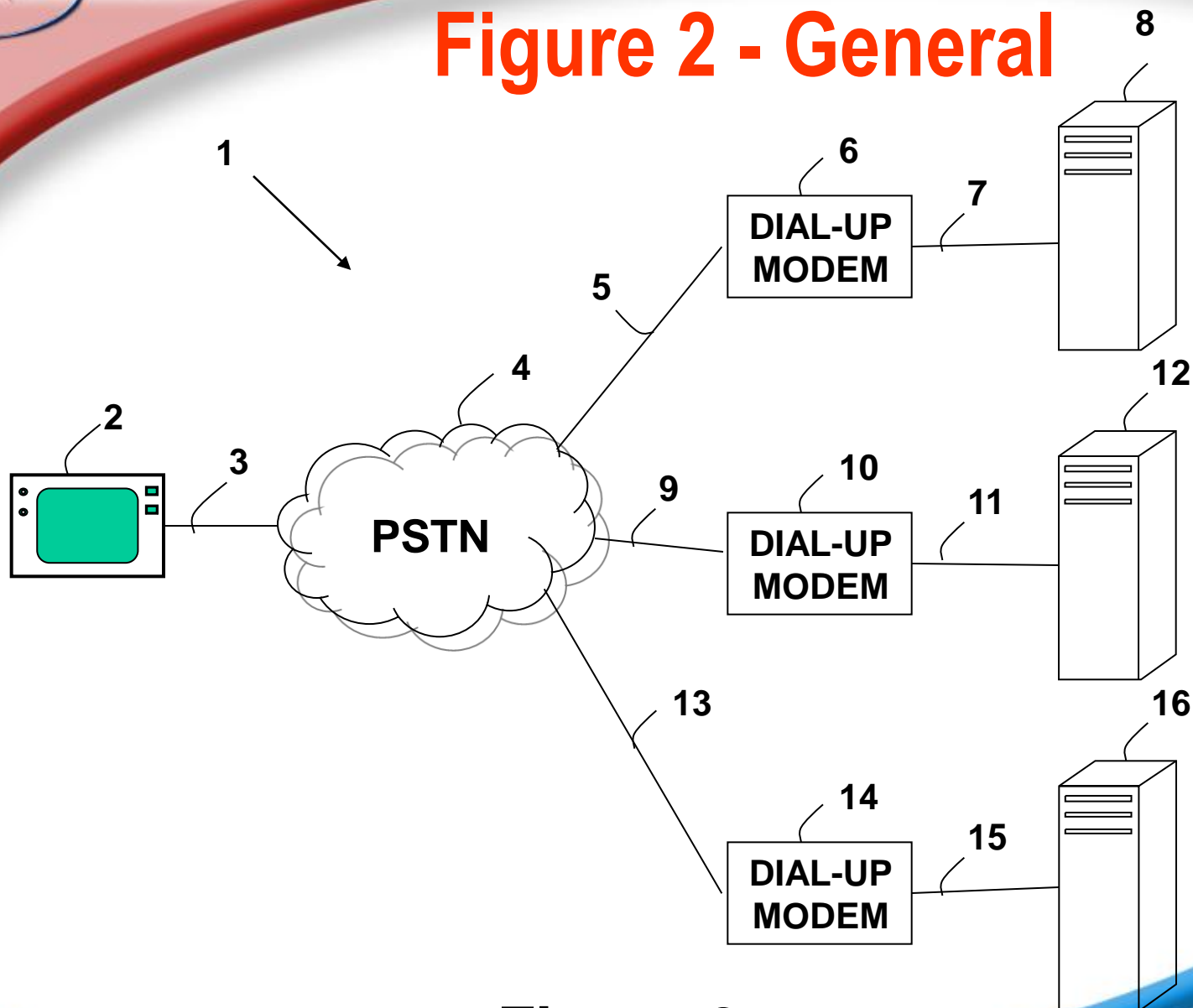
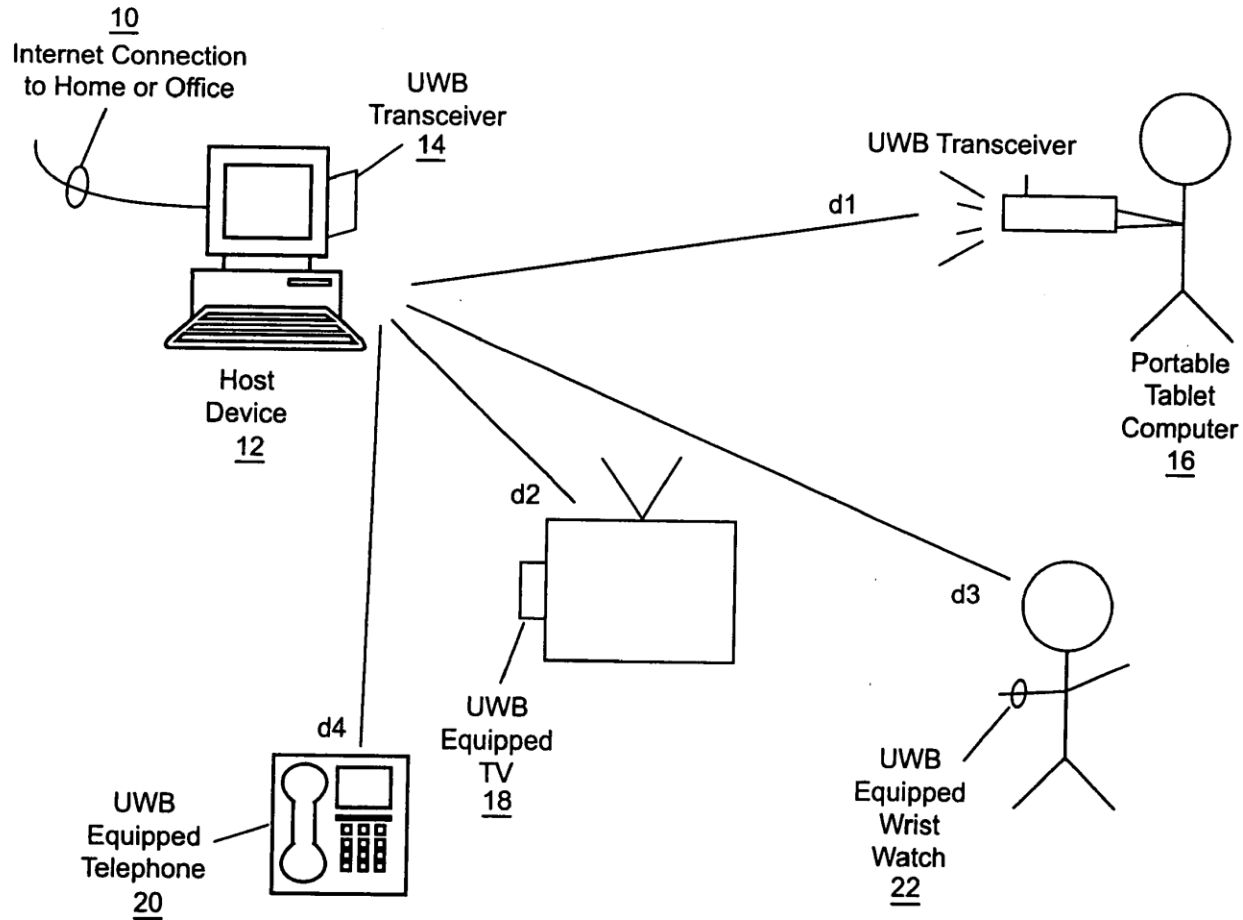


Figure 2

Figure 2 – General Block Diagram



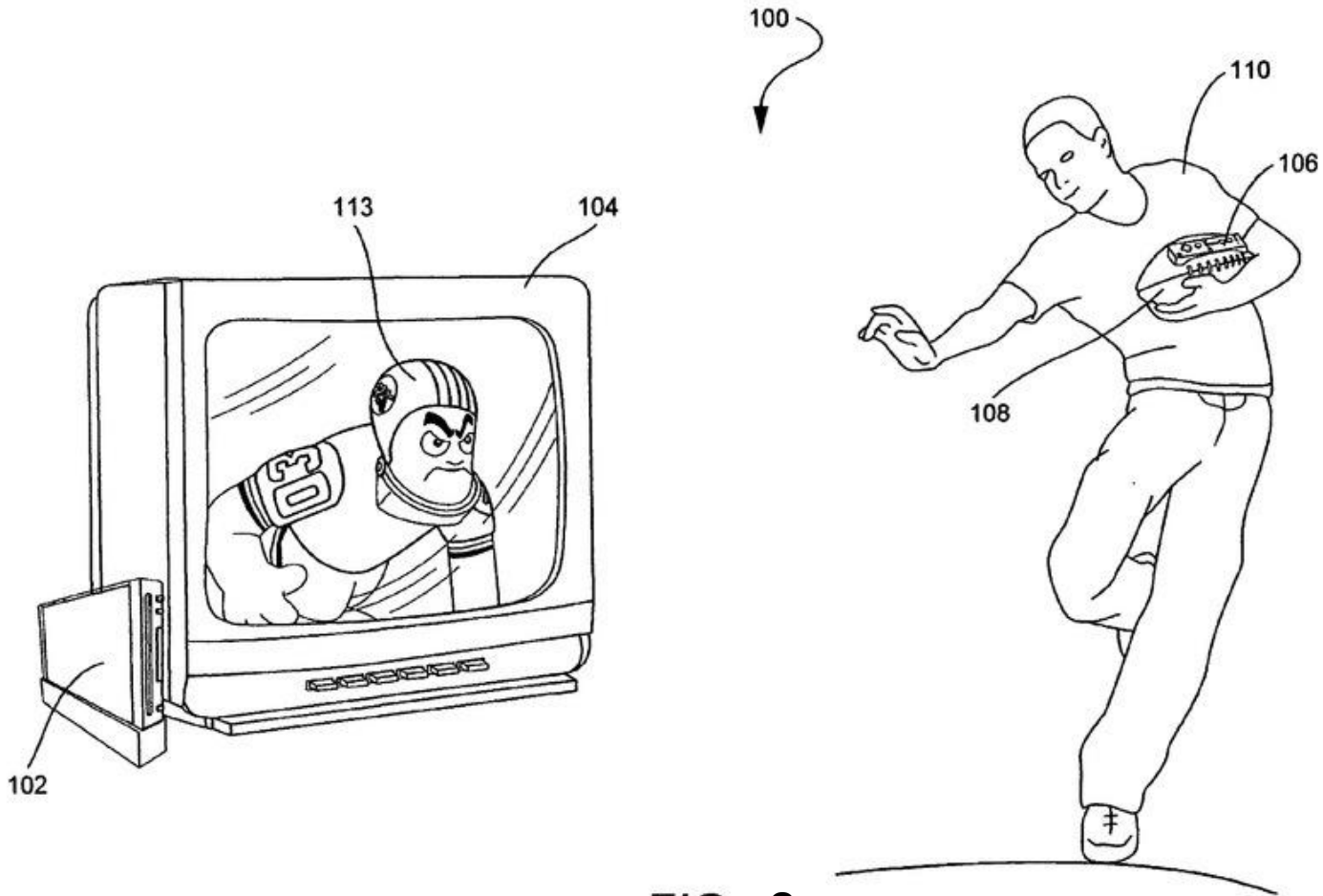


FIG. 2

Figure 2 - Mechanical

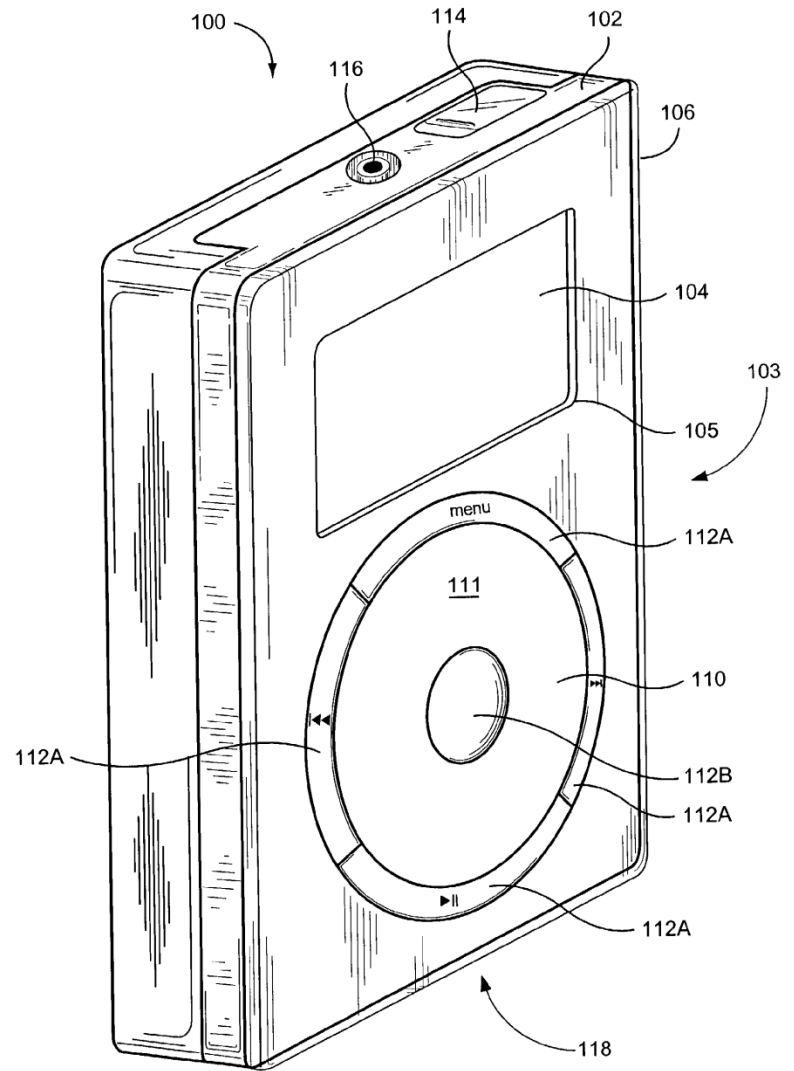
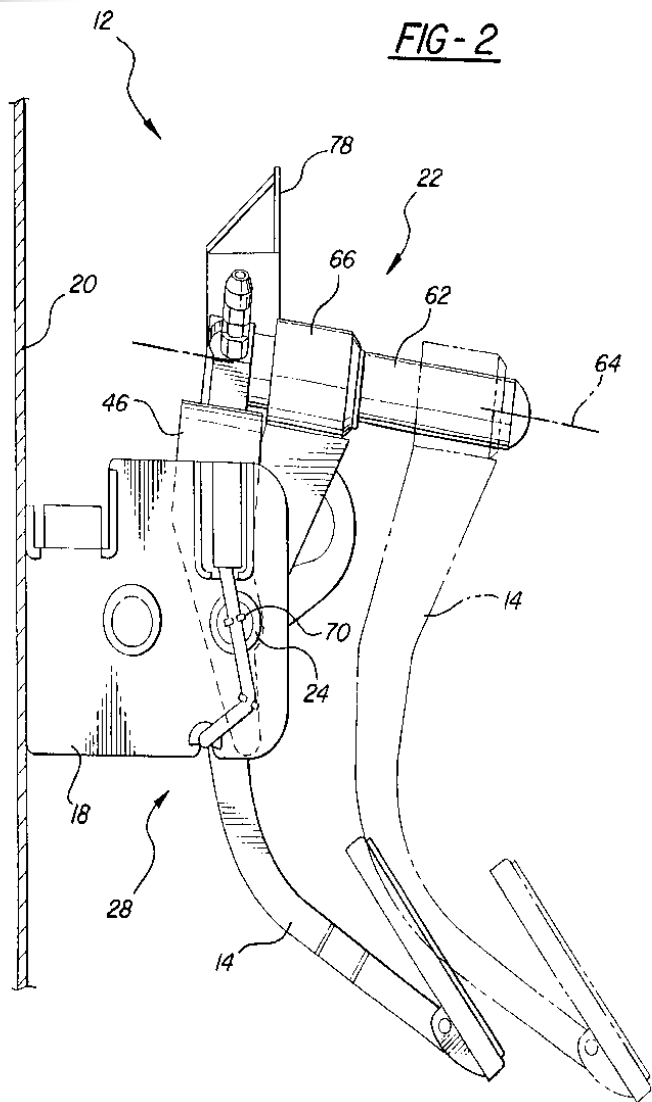
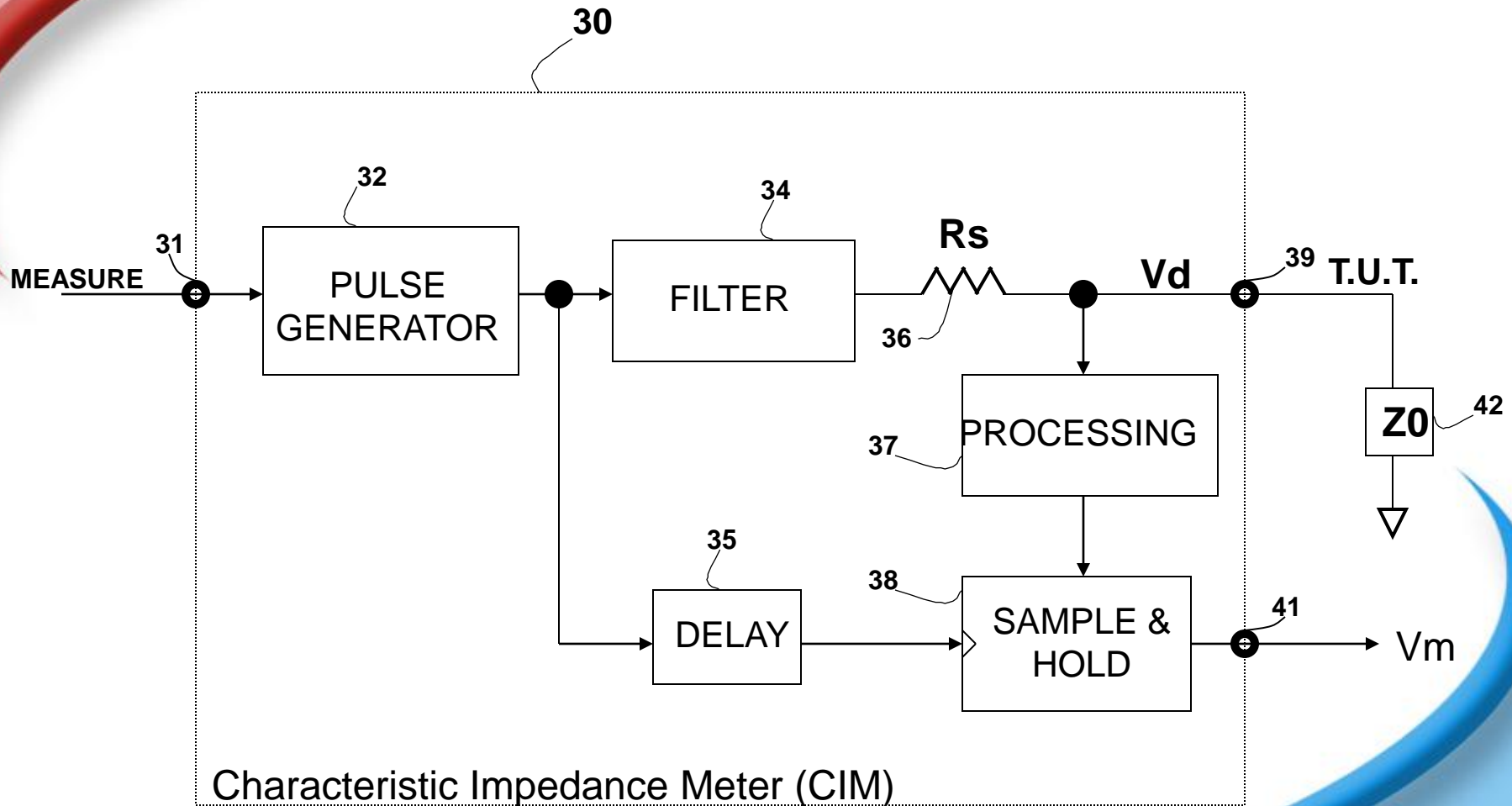


Figure 2 – General Block Diagram



Characteristic Impedance Meter (CIM)

Figure 2 – System

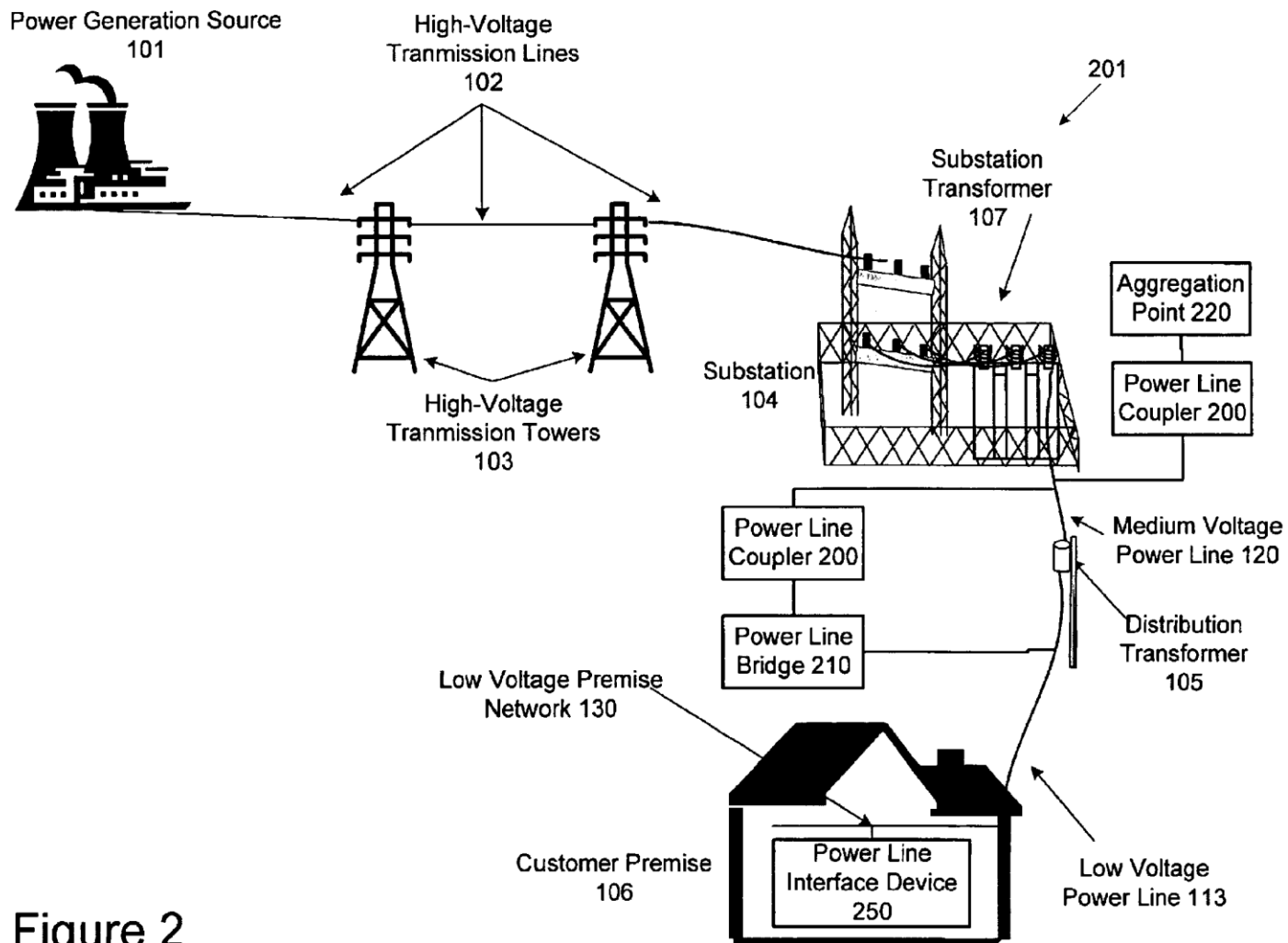


Figure 2

Figure 2 – Flow Chart

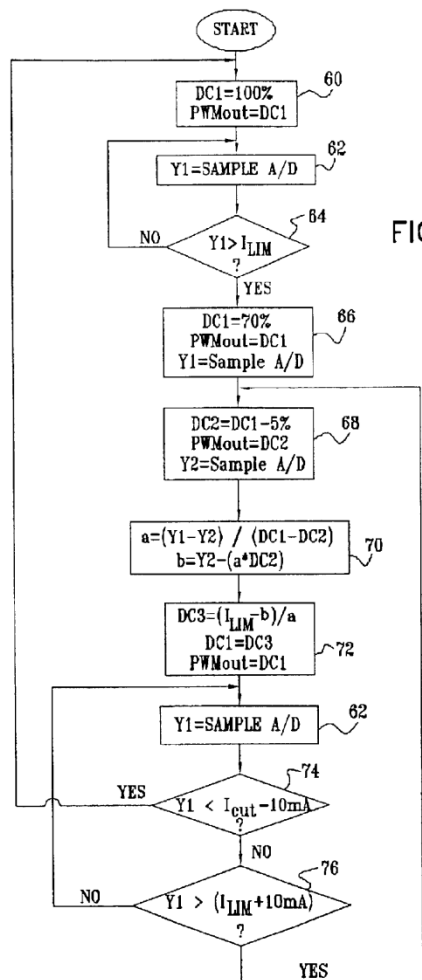


FIG. 5

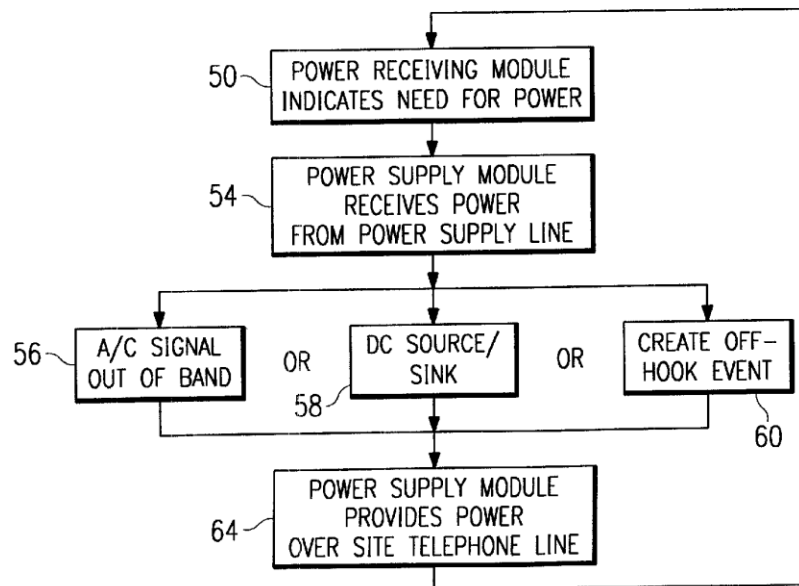
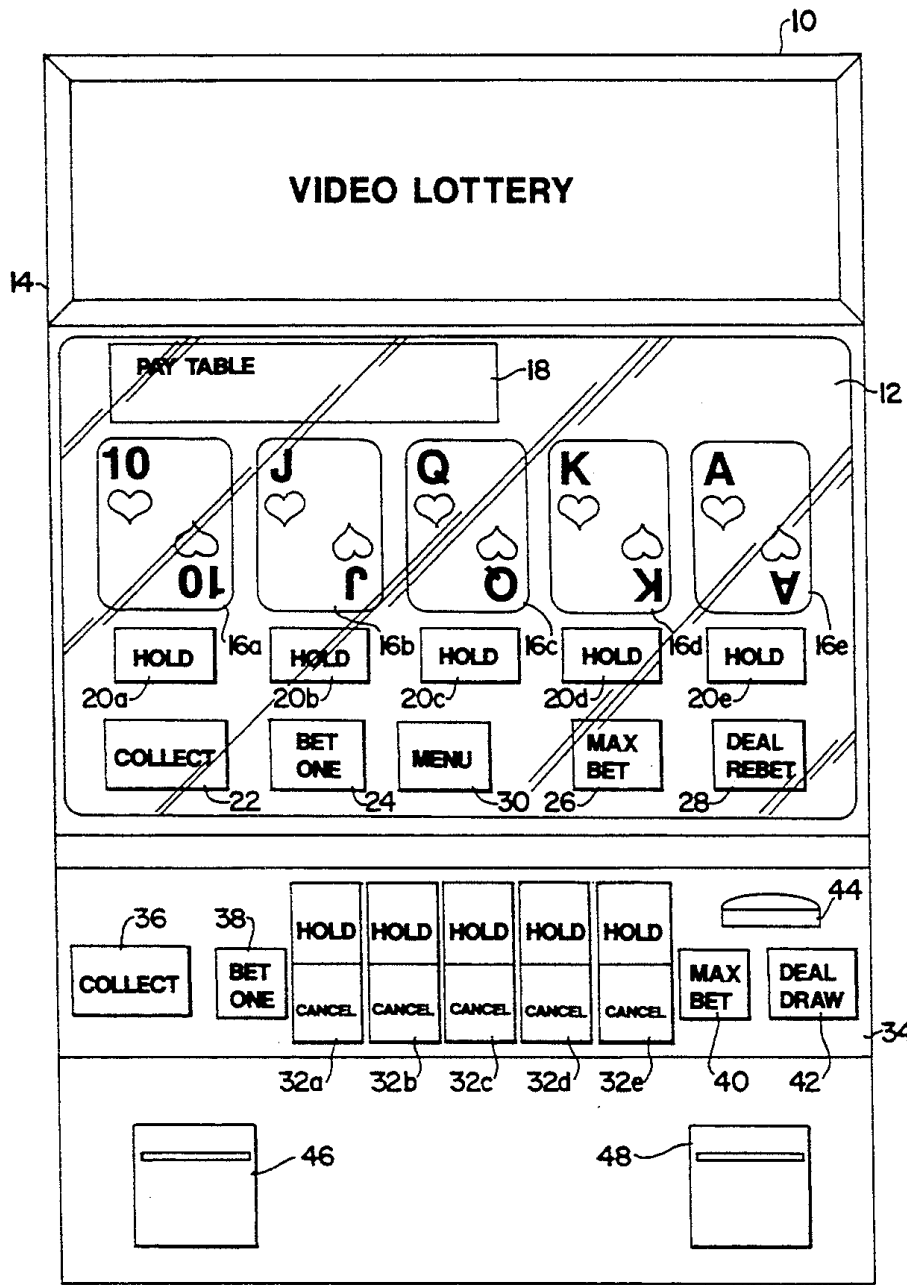


FIG. 2

- Use also if the device has few states.
- Identify the states and the shifting conditions



Figures 2

- Clip-art resources:
 - Off-the-Shelf software
 - <http://www.google.co.il/imghp>
 - <http://office.microsoft.com/en-s/clipart/default.aspx?cag=1>
 - Internet free / paid sites
 - Free images sites:
 - www.istockphot.com
 - www.morguefile.com

Figures 2

- Figure
 - Numbering
 - **Block / connection description**
 - Story
 - Benefits
 - Definitions
- For each block:
 - Name
 - Inputs / Outputs
 - Build, main components
 - Use and Function
 - How the function is implemented
 - More general describing info

Figures 2

- Figure
 - Numbering
 - **Block / connection description**
 - Story
 - Benefits
 - Definitions
- For each connection:
 - Description
 - Type / Medium
 - What is being transferred
 - How connects to the two blocks
 - If electronic signal: Add time / frequency chart
 - If data: What data? What structure?

Figures 2

- Figure
 - Numbering
 - Block / connection description
 - **Story**
 - Benefits
 - Definitions
- Describe the operation of the whole Figure 2, using above terms and numbering.

Figures 2

- Figure
- Numbering
- Block / connection description
- Story
- **Benefits**
- Definitions
 - A **COMPREHENSIVE** list of **MANY** benefits / advantages, even those that seems non-important !!!
 - For each benefit, how the structure provides this benefit.

Figures 2

- Figure
- Numbering
- Block / connection description
- Story
- Benefits
- **Definitions**
 - For each technical term, add the definition.
 - Make sure the definition fits !!!!
 - Use Google 'define: XXX', Wikipedia, technical books, dictionaries or search the Internet.

More Figures 2, 2a, 2b...

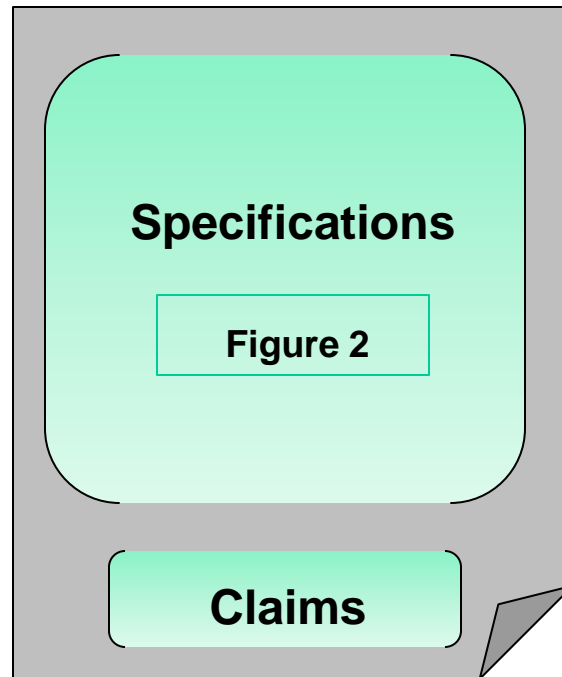
- For each block, identify – **available (BUY)** or **new (MAKE)**:
 - If available: Attach a data sheet / application note / brochure / manual ... of a good example
 - If new: Make Figure 2a for this block, and go through all steps for the new Figure 2a.

Similarly, the IEEE802.11 MAC 54 handles the MAC layer according to IEEE802.11g MAC associated with an antenna 52 (or other wireless port). Such IEEE802.11 MAC 54 is designed to support multiple data rates and encryption algorithms, and is commonly based on embedded processors and various memories. The IEEE802.11 MAC 54 may be implemented using “WaveLAN™ WL60040 Multimode Wireless LAN media Access Controller (MAC)” from Agere Systems of Allentown, Pa. U.S.A. All the bridging required in order to

Writing Specifications Basic Guidelines

- Use English, Word and PowerPoint (preferred)
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- **More is better.** Nothing can be used against you, all are examples.
- Attachment of external material **allowed** and **recommended**.

Utility Patent



Figures 2 - Example

- A block diagram of the “best to explain” example to someone like yourself

Figure 2 - STEPS

- Figure
- Numbering
- Block / connection description
- Story
- Benefits
- Definitions

Patents Basics



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phone: (216) 371-8600 / e-mail: ft@funnytimes.com

(19) **United States**
(12) **Patent Application Publication**
IGOV

(10) **Pub. No.: US 2010/0298774 A1**
(43) **Pub. Date: Nov. 25, 2010**

(54) **METHODS AND DEVICES FOR LAPAROSCOPIC SURGERY**

(76) Inventor: **Igor IGOV**, Lod (IL)

Correspondence Address:
MARTIN D. MOYNIHAN d/b/a PRTSL, INC.
P.O. BOX 16446
ARLINGTON, VA 22215 (US)

(21) Appl. No.: **12/781,831**

(22) Filed: **May 18, 2010**

Related U.S. Application Data

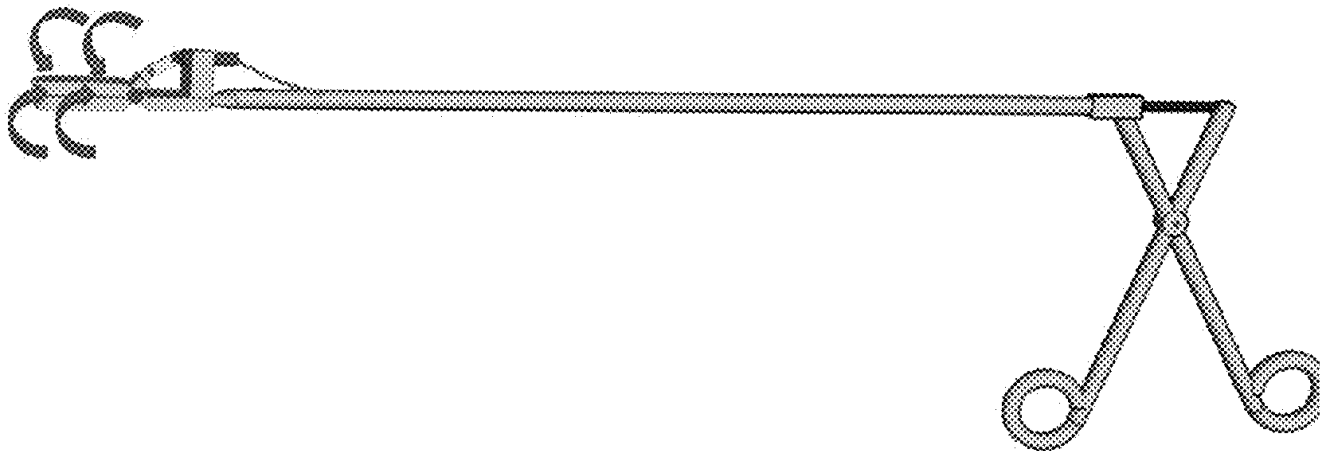
(60) Provisional application No. 61/179,413, filed on May 19, 2009.

Publication Classification

(51) **Int. Cl.**
A61B 17/34 (2006.01)
A61B 17/29 (2006.01)
(52) **U.S. Cl.** **604/164.01; 606/207**

(57) **ABSTRACT**

Two part laparoscopic tools and surgical methods using such tools are presented. The tools and methods enable use of multiple surgical tools each having wide tool heads to be used in a body cavity using a single wide trocar and one or more narrow incisions, thereby reducing surgical risk and enhancing patient comfort and shortening recovery time. Additional instruments for facilitating laparoscopic surgery are also presented.



(54) **POCKET TOOL**

(75) Inventor: **Carl Elsener**, Ibach (CH)

(73) Assignee: **Victorinox AG**, Ibach (CH)

(*) 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.: **10/965,638**

(22) Filed: **Oct. 14, 2004**

(65) **Prior Publication Data**

US 2005/0081302 A1 Apr. 21, 2005

(30) **Foreign Application Priority Data**

Oct. 17, 2003 (AT) A 1650/2003

(51) **Int. Cl.**
B26B 11/00 (2006.01)

(52) **U.S. Cl.** 7/118; 7/170

(58) **Field of Classification Search** 7/118,
7/158, 170; 81/177.4; 365/200
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,854,045 A * 8/1989 Schaub 30/155
6,273,582 B1 * 8/2001 Taggart et al. 362/119

6,341,423 B1 * 1/2002 Taggart et al. 30/169
6,394,813 B1 * 5/2002 Stout et al. 439/11
6,561,421 B1 * 5/2003 Yu 235/451
6,675,419 B1 * 1/2004 Rivera 7/128
2004/0080989 A1 * 4/2004 Yu 365/200

FOREIGN PATENT DOCUMENTS

JP 2003 - 10570 1/2003

* cited by examiner

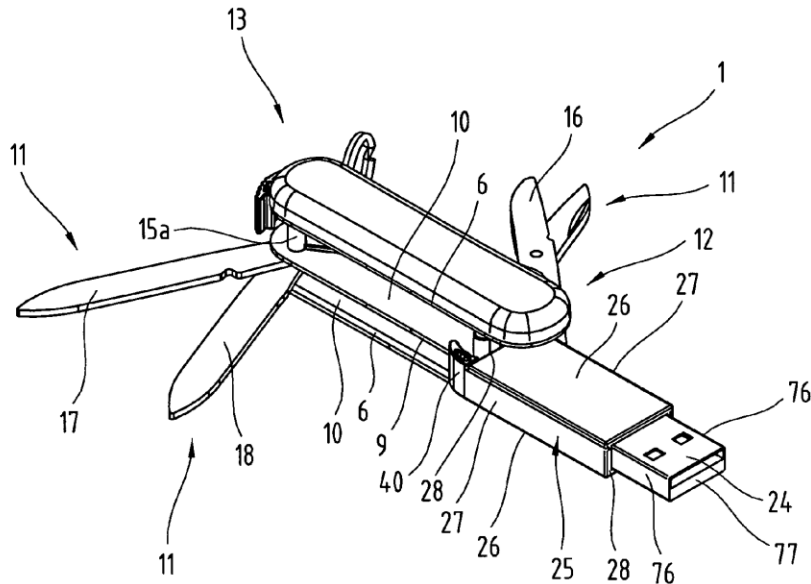
Primary Examiner—David B. Thomas

(74) *Attorney, Agent, or Firm*—Fross Zelnick Lehrman & Zissu, P.C.; Philip T. Shannon, Esq.; Charles T. J. Weigell, Esq.

(57) **ABSTRACT**

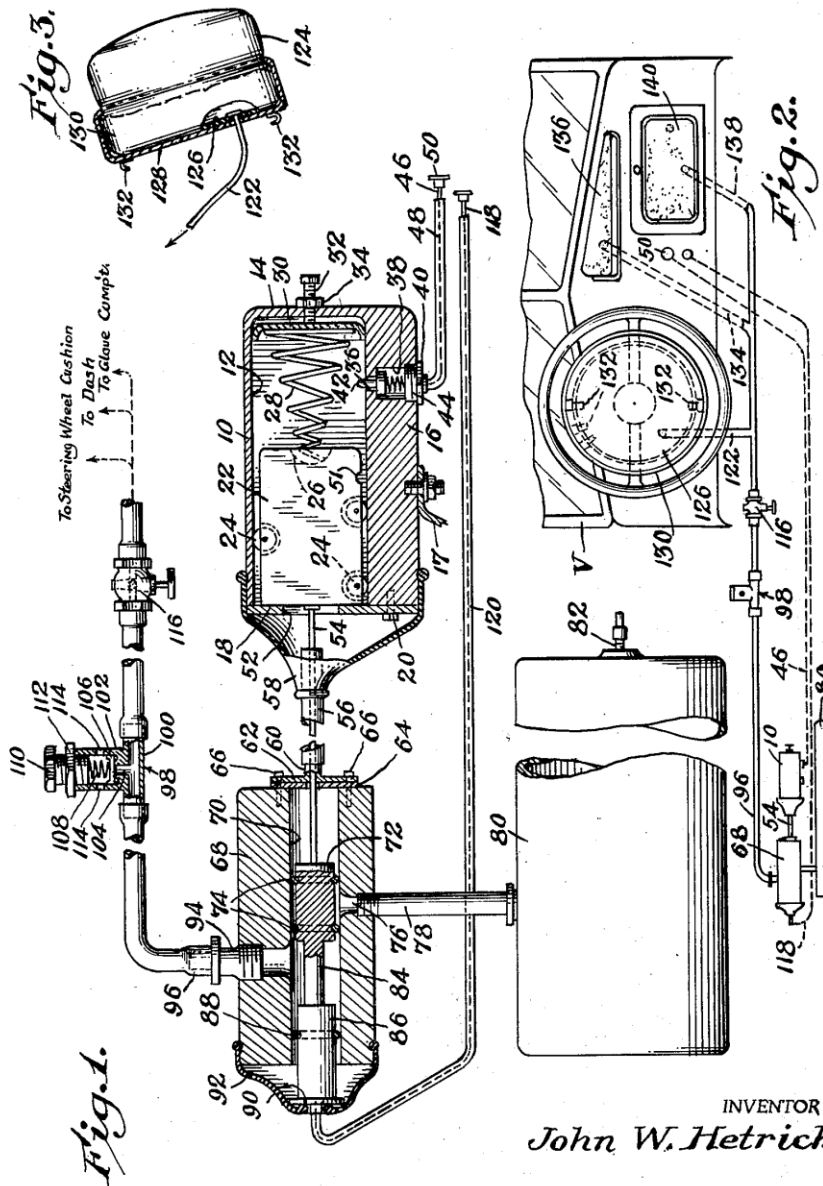
The invention specifies a pocket tool, particularly a pocket knife (1) or plate-like tool card, comprising a housing (2) with at least one receiving area (10), and at least two functional components (11) movable from a storage position within the receiving area (10), into a working position outside of the receiving area (10). The first functional component (11) is designed as a tool, particularly a pair of scissors (16) or knife (1). The second functional component (11) has a support casing (25) and is equipped with a recordable and readable, nonvolatile memory, as well as with an interface (24). A releasable locking device and a longitudinal guide or pivot bearing are arranged between the support casing (25) of the second functional component (11) and the housing (2).

118 Claims, 14 Drawing Sheets



SAFETY CUSHION ASSEMBLY FOR AUTOMOTIVE VEHICLES

Filed Aug. 5, 1952



INVENTOR
John W. Hetrick

BY
Mc Morrow, Peerman + Davidson
ATTORNEYS

United States Patent Office

3,167,440

Patented Jan. 26, 1965

1

2

3,167,440

PLASTIC MODELING COMPOSITION OF A SOFT, PLIABLE WORKING CONSISTENCY

Noah W. McVicker and Joseph S. McVicker, Cincinnati, Ohio, assignors to Rainbow Crafts, Inc., Cincinnati, Ohio, a corporation of Ohio

No Drawing. Filed May 17, 1960, Ser. No. 29,573

16 Claims. (Cl. 106—150)

It has been found that a very excellent compound may be produced within the following ranges wherein the components of the composition are as follows:

Flour	-----pounds---	450-550
Water	-----do----	450-550
Salt	-----do----	75-200
Hydrocarbon petroleum distillate	----gallons--	1 to 3
Hardening and astringent agent	-----pounds--	9-20
Preservation, drying and antiseptic agent	-----do----	4-10
Perfume	-----do----	1-2
Coloring matter	-----do----	2 to 4

In addition to the specific foregoing examples and ranges, tests have shown that a suitable composition may

lump-free. The thin film coating in addition to giving the process mixture a soft and pliable texture also renders the mixture smooth and velvety so that it will not be sticky when coming into contact with other objects or the hands of the user.

Any grain flour may be used but wheat flour is preferred. However, any of the other grain flours may be used, and they may be used alone or in combination. Rye flour is preferred next to wheat flour. The grain flour

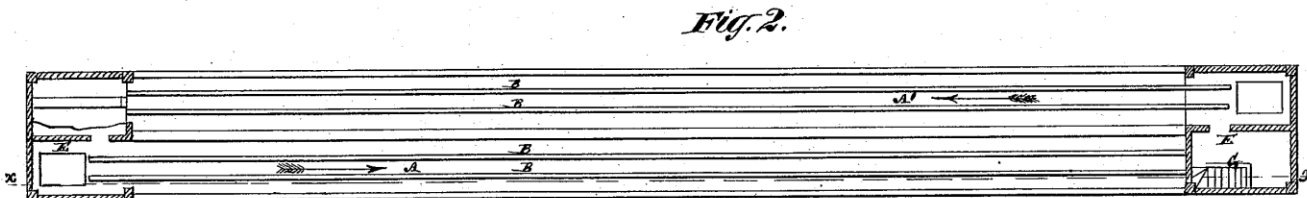
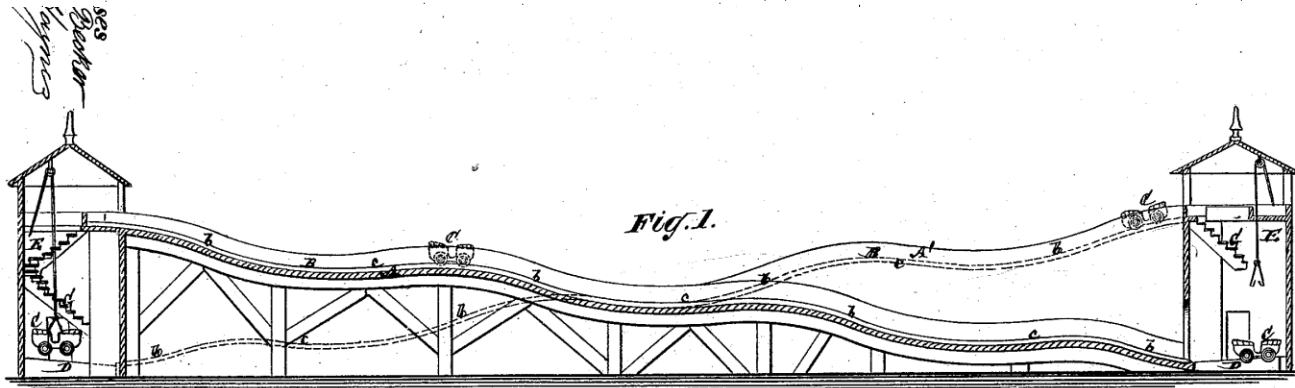
60 any m
named
heated
water
carried
65 ing co:
medial
The
ings of
is soft
70 may b
shape
mar d
toxic
should

UNITED STATES PATENT OFFICE.

RICHARD KNUDSEN, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN INCLINED-PLANE RAILWAYS.

Specification forming part of Letters Patent No. **198,888**, dated January 1, 1878; application filed November 12, 1877.



*Richard Knudsen
by his Attorneys
Brown & Allen*

No. 198,888.

R. KNUDSEN.
Inclined-Plane Railway.

Patented Jan. 1, 1878.

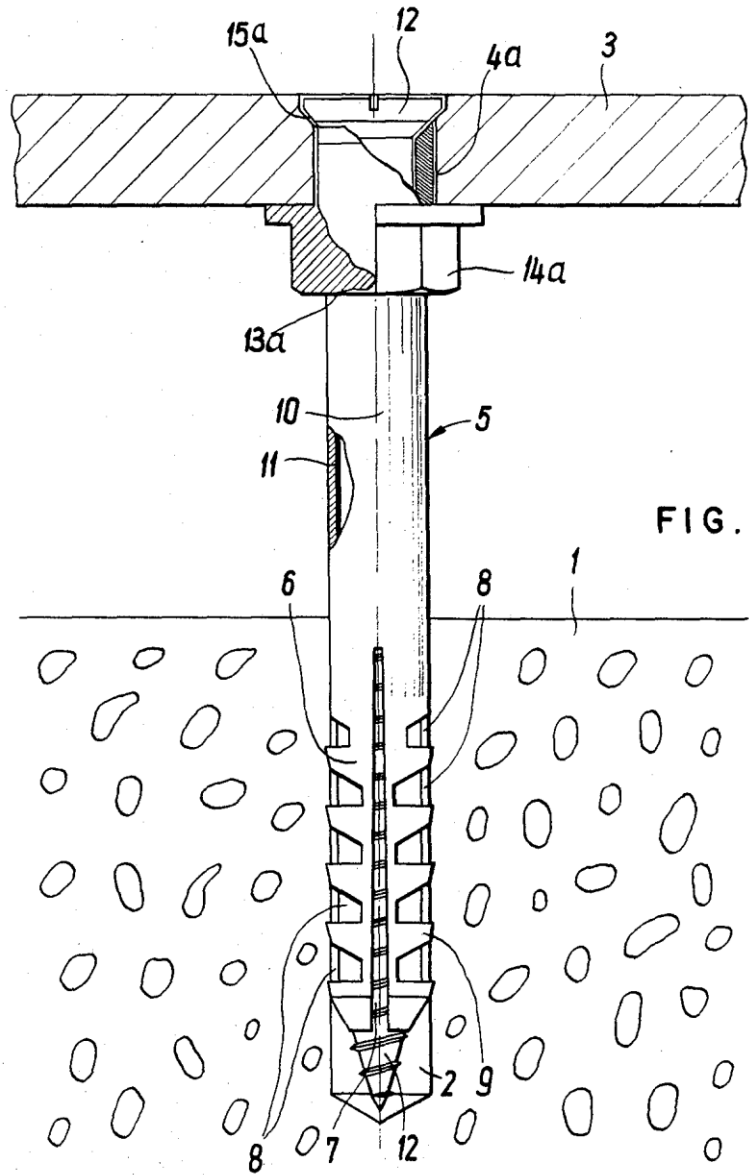


FIG. 2

UNITED STATES PATENT OFFICE

2,620,061

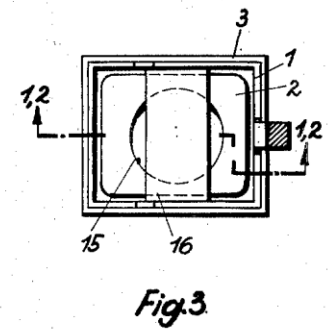
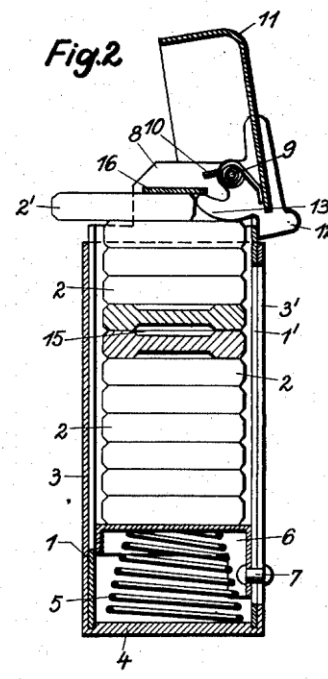
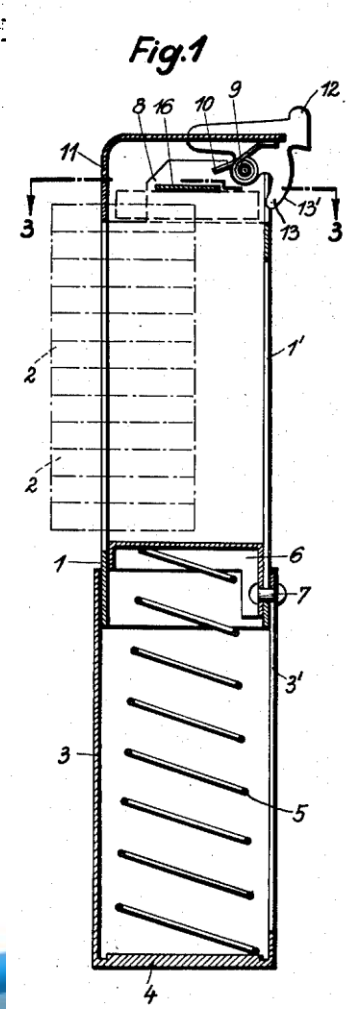
POCKET ARTICLE DISPENSING CONTAINER

Oskar Uxa, Vienna, Austria, assignor to Eduard Haas, Muhlbach-Attersee, Austria

Application October 14, 1949, Serial No. 121,251
In Austria October 28, 1948

3 Claims. (Cl. 206-42)

1



- [54] **DIGITAL ENCODING PROCESS**
- [75] Inventors: **Bernhard Grill**, Rednitzhembach;
Karl-Heinz Brandenburg, Erlangen;
Thomas Sporer, Fürth; **Bernd Kürten**;
Ernst Eberlein, both of
 Grossenseebach, all of Germany
- [73] Assignee: **Fraunhofer Gesellschaft zur
 Foerderung der angewandten
 Forschung e.V.**, Munich, Germany

4,942,467	7/1990	Waldman et al.	348/412
4,972,484	11/1990	Theille et al.	395/2.36
5,031,038	7/1991	Guillemot et al.	358/133
5,136,613	8/1992	Dumestre, III	375/1
5,222,189	6/1993	Fielder	395/2.38
5,341,457	8/1994	Hall, II et al.	395/2.35

Primary Examiner—David K. Moore
Assistant Examiner—Tariq Hafiz
Attorney, Agent, or Firm—Evenson, McKeown, Edwards &
 Lenahan, P.L.L.C.

- [21] Appl. No.: **380,135**
- [22] Filed: **Jan. 26, 1995**

Related U.S. Application Data

- [63] Continuation of Ser. No. 169,768, Dec. 20, 1993, abandoned, which is a continuation of Ser. No. 768,239, filed as PCT/DE90/00286, Apr. 12, 1990, abandoned.

Foreign Application Priority Data

- Apr. 17, 1989 [DE] Germany 39 12 605.6
- [51] **Int. Cl.⁶** **G01L 3/02**; G01L 9/00
- [52] **U.S. Cl.** **395/2.12**; 395/2.09; 395/2.1;
 395/2.91
- [58] **Field of Search** 381/36-53, 29,
 381/31; 395/2, 2.87; 348/412

References Cited

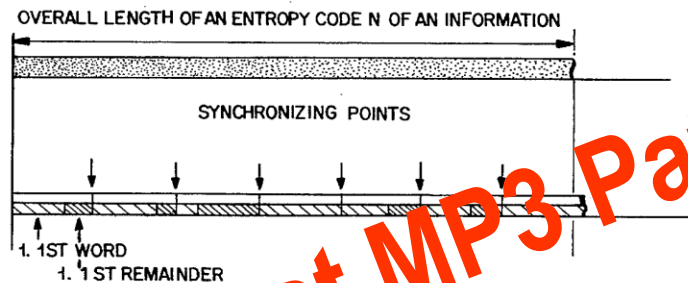
U.S. PATENT DOCUMENTS

4,270,025	5/1981	Alsop et al.	395/2.21
4,813,056	3/1989	Fedele	375/27
4,815,134	3/1989	Picone et al.	395/2.31

[57] **ABSTRACT**

A digital encoding process for transmitting and/or storing acoustical signals and, in particular, music signals, in which scanned values of the acoustical signal are transformed by means of a transformation or a filter bank into a sequence of second scanned values, which reproduce the spectral composition of the acoustical signal, and the sequence of second scanned values is quantized in accordance with the requirements with varying precision and is partially or entirely encoded by an optimum encoder, and in which a corresponding decoding and inverse transformation takes place during the reproduction. An encoder is utilized in a manner in which the occurrence probability of the quantized spectral coefficient is correlated to the length of the code in such a way that the more frequently the spectral coefficient occurs, the shorter the code word. A code word and, if needed, a supplementary code is allocated to several elements of the sequence or to a value range in order to reduce the size of the table of the encoder. A portion of the code words of variable length are arranged in a raster, and the remaining code words are distributed in the gaps still left so that the beginning of a code word can be more easily found without completely decoding or in the event of faulty transmission.

32 Claims, 2 Drawing Sheets



- ▬ Largest possible segment word length equals synchronization frame
- ▬ First to N/Z word of an information beginning respectively after the length of the longest possible word
- ▨ Remainder left over per synchronization frame, which is filled with the remaining bits following the allocation of the sites having a defined beginning
- ▩ "extending" bits, which are arranged in the 1st remainder

The First MP3 Patent

(12) **United States Patent**
Biggs

(10) **Patent No.:** **US 6,800,312 B1**
(45) **Date of Patent:** **Oct. 5, 2004**

(54) **MARSHMALLOW SYSTEM**

(76) Inventor: **Miles J. Biggs**, 2850 McCammon Rd.,
Rockford, TN (US) 37853

(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 228 days.

(21) Appl. No.: **10/106,664**

(22) Filed: **Mar. 26, 2002**

(51) **Int. Cl.**⁷ **A23G 3/00**

(52) **U.S. Cl.** **426/103; 426/571; 426/573;**
426/660

(58) **Field of Search** 426/103, 571,
426/573, 660, 466, 94

(56) **References Cited**

U.S. PATENT DOCUMENTS

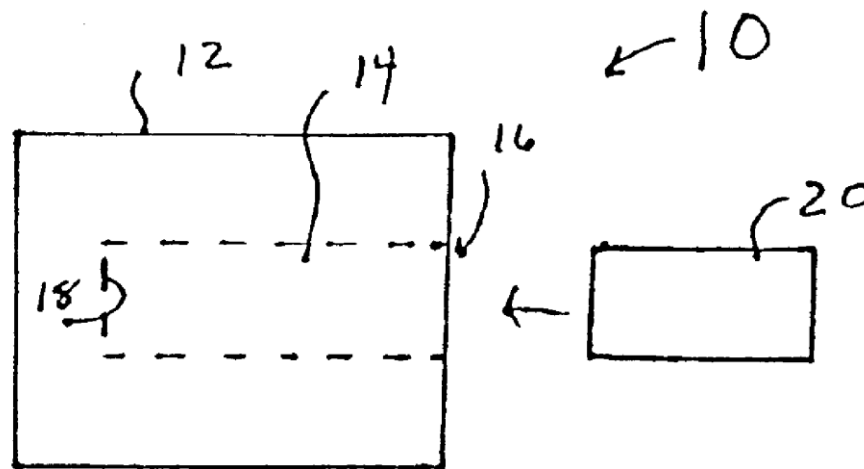
2,847,311 A 8/1958 Doumak et al.

4,039,688 A 8/1977 Hayward et al.
4,120,627 A 10/1978 Abe
5,429,830 A * 7/1995 Janovsky et al. 426/94
5,731,020 A 3/1998 Russo
6,224,920 B1 5/2001 Reinikainen et al.
6,296,884 B1 10/2001 Okerlund
6,616,963 B1 * 9/2003 Zerby et al. 426/660

* cited by examiner

Primary Examiner—N. Bhat

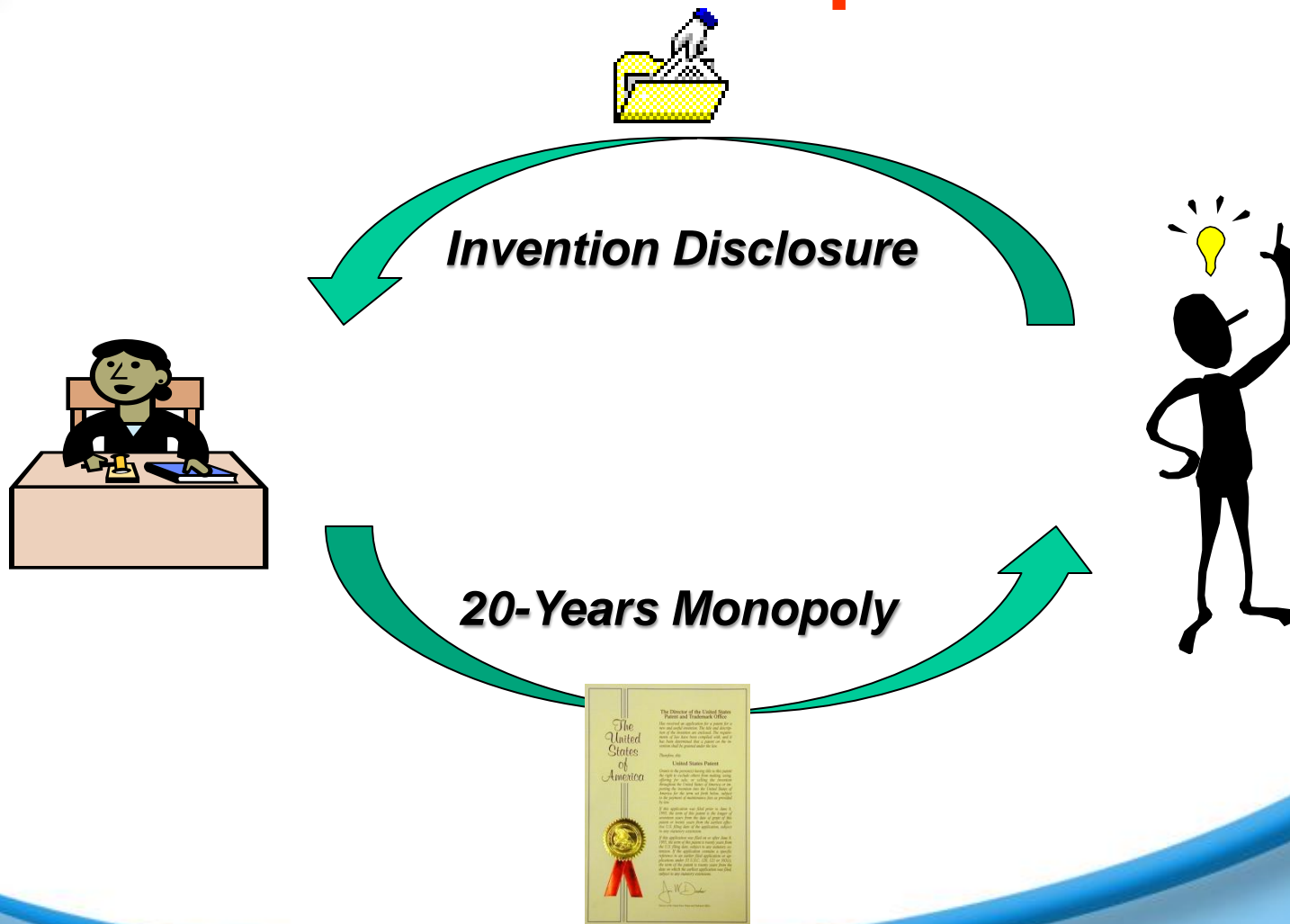
(74) *Attorney, Agent, or Firm*—Luedeka, Neely & Graham
PC



What is claimed is:

1. A marshmallow system, comprising a marshmallow having an axial open-ended bore defined therein having an open end defined adjacent an edge of the marshmallow and a solid chocolate portion configured for being received axially within the bore, wherein the chocolate may be positioned as a solid within the bore so as to remain within the open-ended bore at ambient temperatures and the thus prepared marshmallow/chocolate portion exposed to heat to toast the marshmallow and substantially melt the chocolate portion.

Patent = Compromise



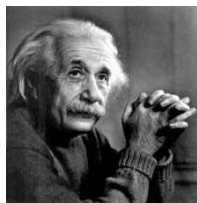
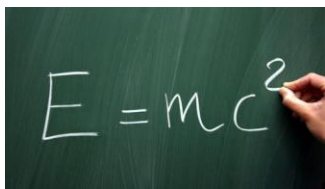
Disclosure

- **Enablement**: A patent application must disclose the claimed invention in sufficient detail for **Person Having Ordinary Skill In The Art (PHOSITA)** to carry out that claimed invention.

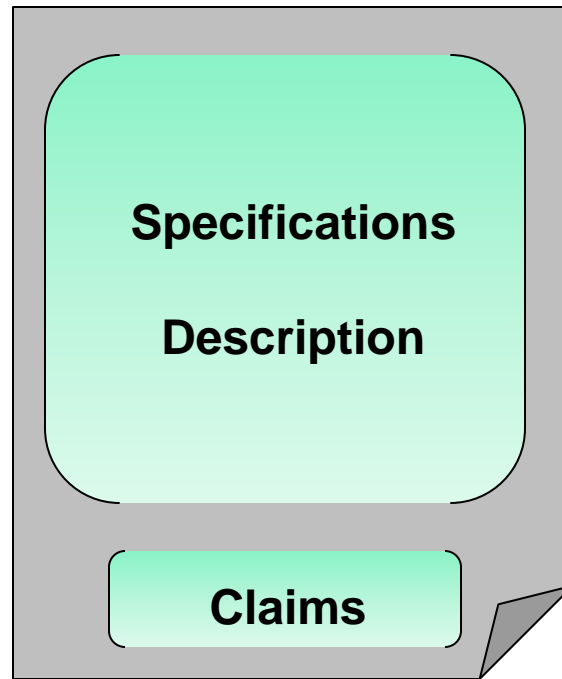
(א) הפירוט יכלול שם שיש בו כדי לזהות את האמצאה, את תיאורה, עם שרטוטים לפי הצורך, וכן תיאור דרכי הביצוע של האמצאה שעל פיו יוכל בעל המקצוע לבצע.

Patentable Subject Matter

- Anything under the sun (that can be) made by man
- Process, machine, product or composition of matter
- NOT natural phenomenon or physical laws



Utility Patent



Utility Patent

Apparatus

- A device/system for XXX, comprising:
 - Item A
 - Item B
 - Item C
 -

Method

- A method for XXX, comprising:
 - Step A
 - Step B
 - Step C
 -

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

(10) **Patent No.:** **US 6,751,348 B2**
(45) **Date of Patent:** **Jun. 15, 2004**

(54) **AUTOMATED DETECTION OF PORNOGRAPHIC IMAGES**
(75) Inventors: **Vasile Buzuloiu**, Bucuresti (RO); **Mihai Cuic**, Bucuresti (RO); **Razvan Beuran**, Thoiry (FR); **Horia Grecu**, Bucuresti (RO); **Alexandru Drimborean**, Co. Galway (IE); **Peter Corcoran**, Cregg (IE); **Eran Steinberg**, San Francisco, CA (US)

6,065,056 A * 5/2000 Bradshaw et al. 709/229
6,266,664 B1 * 7/2001 Russell-Falla et al. 707/5
6,345,283 B1 * 2/2002 Anderson 707/205
6,389,472 B1 * 5/2002 Hughes et al. 709/229
6,407,777 B1 6/2002 DeLuca 348/576
6,446,119 B1 * 9/2002 Olah et al. 709/224
6,650,777 B1 * 11/2003 Jensen et al. 382/203
6,654,067 B1 * 11/2003 Mc Gee et al. 348/700
2002/0126893 A1 9/2002 Held et al. 382/167
2002/0136450 A1 9/2002 Chen et al. 382/165

(73) Assignee: **Fotonation Holdings, LLC**, Peterborough, NH (US)

* cited by examiner

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 473 days.

Primary Examiner—Andrew W. Johns
Assistant Examiner—Amir Alavi
(74) *Attorney, Agent, or Firm*—Sawyer Law Group LLP

(21) Appl. No.: **09/823,139**

(22) Filed: **Mar. 29, 2001**

(65) **Prior Publication Data**

US 2002/0159630 A1 Oct. 31, 2002

(51) **Int. Cl.**⁷ **G06K 9/00**; G06K 9/40; G06K 9/62; G06K 9/68

(52) **U.S. Cl.** **382/165**; 382/260; 382/218; 382/224

(58) **Field of Search** 382/162, 164, 382/165, 117, 118, 133, 203, 218, 224, 225, 250, 253, 260, 276, 285, 287, 291, 306; 709/224, 229

(56) **References Cited**

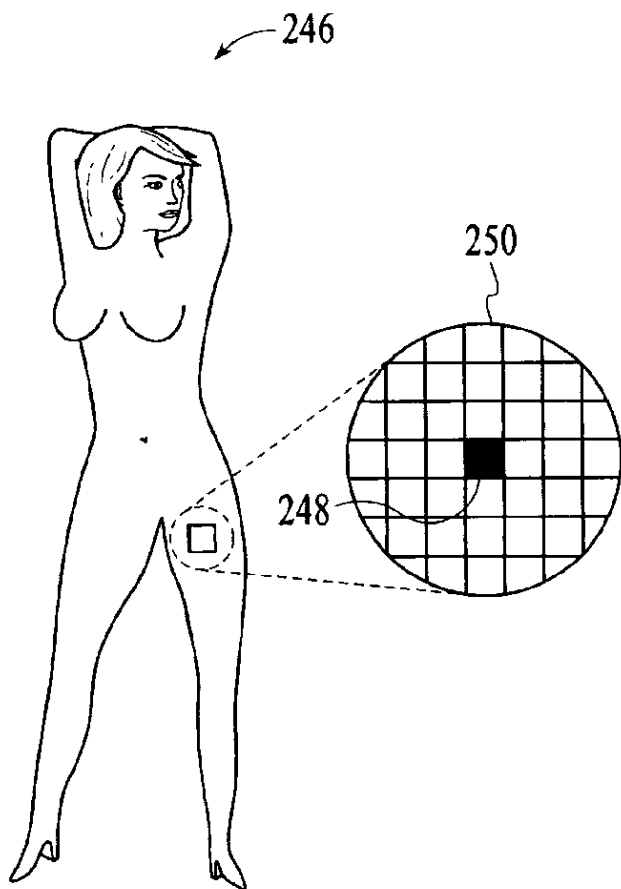
U.S. PATENT DOCUMENTS

5,987,611 A * 11/1999 Freund 713/201

(57) **ABSTRACT**

A method of detecting pornographic images, wherein a color reference database is prepared in LAB color space defining a plurality of colors representing relevant portions of a human body. A questionable image is selected, and sampled pixels are compared with the color reference database. Areas having a matching pixel are subjected to a texture analysis to determine if the pixel is an isolated color or if other comparable pixels surround it; a condition indicating possible skin. If an area of possible skin is found, the questionable image is classified as objectionable. A further embodiment includes preparation of a questionable image reference shape database defining objectionable shapes. An image with a detected area of possible skin is compared with the shape database, and depending on the results of the shape analysis, a predefined percentage of the images are classified for manual review.

22 Claims, 13 Drawing Sheets



$$V = \frac{\sum_t^P \sqrt{\text{colour}^2}}{P}$$

V is variance

P is number of pixels

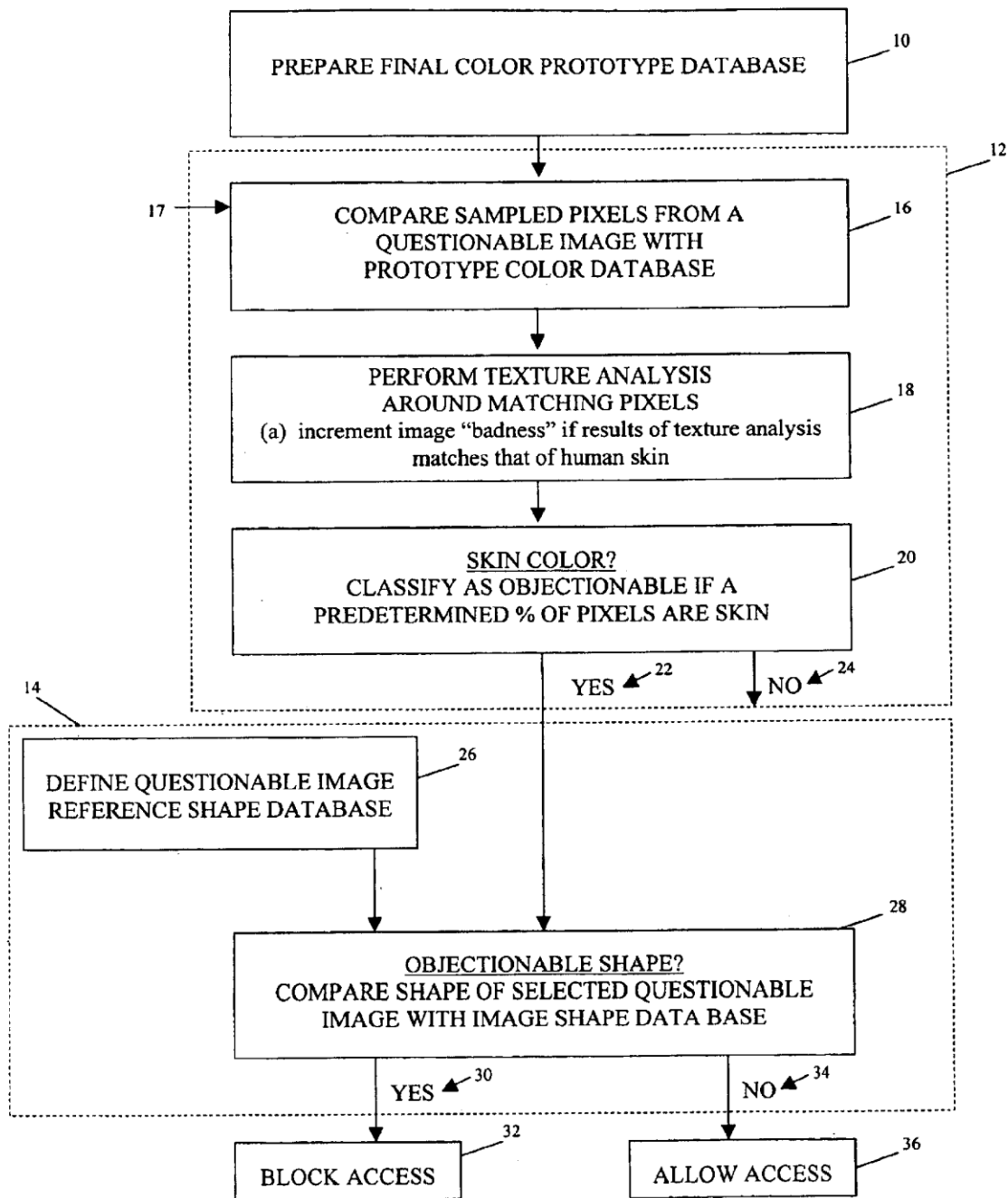
$$\text{colour}^2 = (L - \text{mean } L)^2 + (a - \text{mean } a)^2 + (b - \text{mean } b)^2$$

$$\text{mean } L = \frac{\sum_1^P L}{P} \quad \text{mean } a = \frac{\sum_1^P a}{P}$$

$$\text{mean } b = \frac{\sum_1^P b}{P}$$

$V \geq 10 \Rightarrow$ not skin

$V < 10 \Rightarrow$ skin



What is claimed is:

1. A method for use in detecting a pornographic image comprising:

analyzing a questionable image, said analyzing including

- (a) preparing a final color prototype database having a plurality of final color prototype values, said final color prototype database prepared from selected skin image samples from a plurality of images;
- (b) filtering a questionable image, said filtering including
 - (i) comparing a color of a questionable pixel from a questionable image with said final color prototype values;
 - (ii) performing a texture analysis on an area surrounding said questionable pixel if said color of said questionable pixel matches a color of a final color prototype, wherein said texture analysis determines a variance in color between said questionable pixel and a color of pixels in said area; and
 - (iii) classifying said pixel as a potential skin pixel if said texture analysis indicates that said area has a skin texture.

2. A method as recited in claim 1 further comprising

- (a) preparing a shape prototype database including a plurality of prototype image shapes; and
- (b) wherein said filtering further includes
 - (i) comparing a shape of a questionable image including a said potential skin pixel with a said prototype image shape; and
 - (ii) classifying said questionable image including said potential skin pixel as an objectionable image if a shape of said questionable image corresponds to a shape of a said prototype image shape.

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

(10) **Patent No.:** **US 6,788,200 B1**
(45) **Date of Patent:** **Sep. 7, 2004**

(54) **FOOTWEAR WITH GPS**

(76) Inventors: **Mitchell W Jamel**, 9121 Paragon Way, Boynton Beach, FL (US) 33437; **Patrick E Bertagna**, 117 W. 9th St., Suite 1214, Los Angeles, CA (US) 90015; **Ralph H Davis, Jr.**, 786 Bolsana Dr., Lauguna Beach, CA (US) 92651

(*) 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.: **10/274,730**

(22) Filed: **Oct. 21, 2002**

(51) **Int. Cl.**⁷ **G08B 1/08**; A43B 3/00

(52) **U.S. Cl.** **340/539.13**; 340/539.11; 340/539.15; 340/825.36; 36/1; 36/75 R; 455/562.1; 455/575.7; 701/213; 342/357.06

(58) **Field of Search** 340/539.13, 539.11, 340/539.15, 825.36, 825.49; 36/1, 75 R; 455/73, 75, 575.1, 575.8, 90.3, 562.1, 575.7; 701/213; 342/357.06, 357.07

(56) **References Cited**

U.S. PATENT DOCUMENTS

1,597,823 A 9/1926 Randolph

2,760,278 A	8/1956	Agrillo	
2,897,609 A	8/1959	Bodkin	
4,703,445 A	10/1987	Dassler	
4,870,700 A	9/1989	Ormanns et al.	
5,285,586 A *	2/1994	Goldston et al.	36/137
5,473,518 A	12/1995	Haber et al.	
5,557,259 A	9/1996	Musa	
5,574,432 A	11/1996	McCarthy	
5,655,316 A	8/1997	Huang	
5,748,087 A *	5/1998	Ingargiola et al.	340/573
5,970,631 A	10/1999	Inman	
6,012,822 A	1/2000	Robinson	
6,014,080 A *	1/2000	Layson, Jr.	340/573.1
6,247,251 B1	6/2001	James	
6,259,399 B1 *	7/2001	Krasner	342/357.06
2003/0160732 A1 *	8/2003	Van Heerden et al.	343/897

* cited by examiner

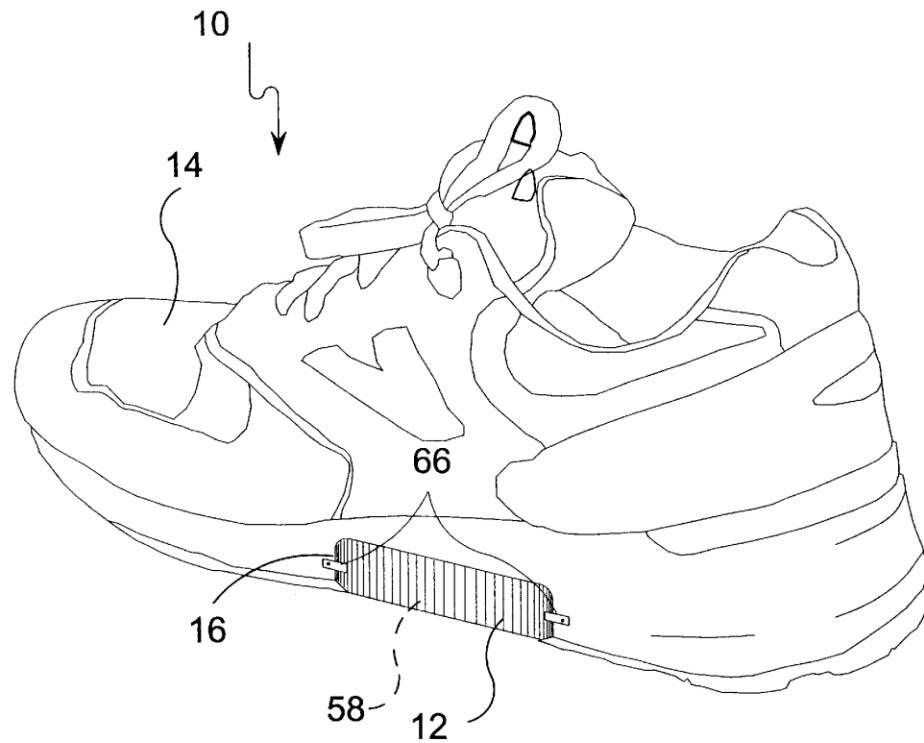
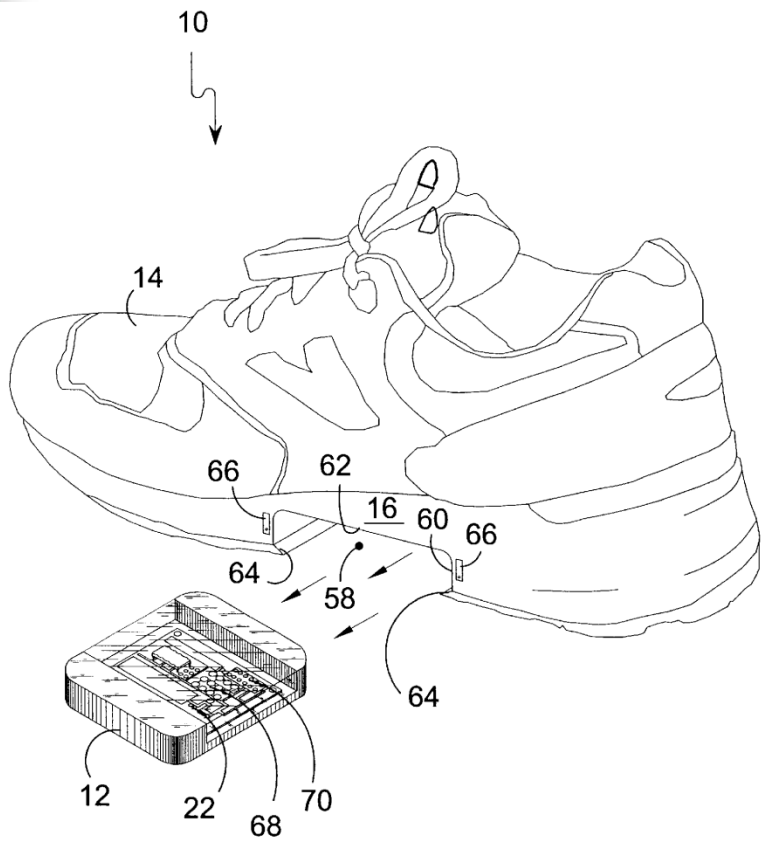
Primary Examiner—Donnie L. Crosland

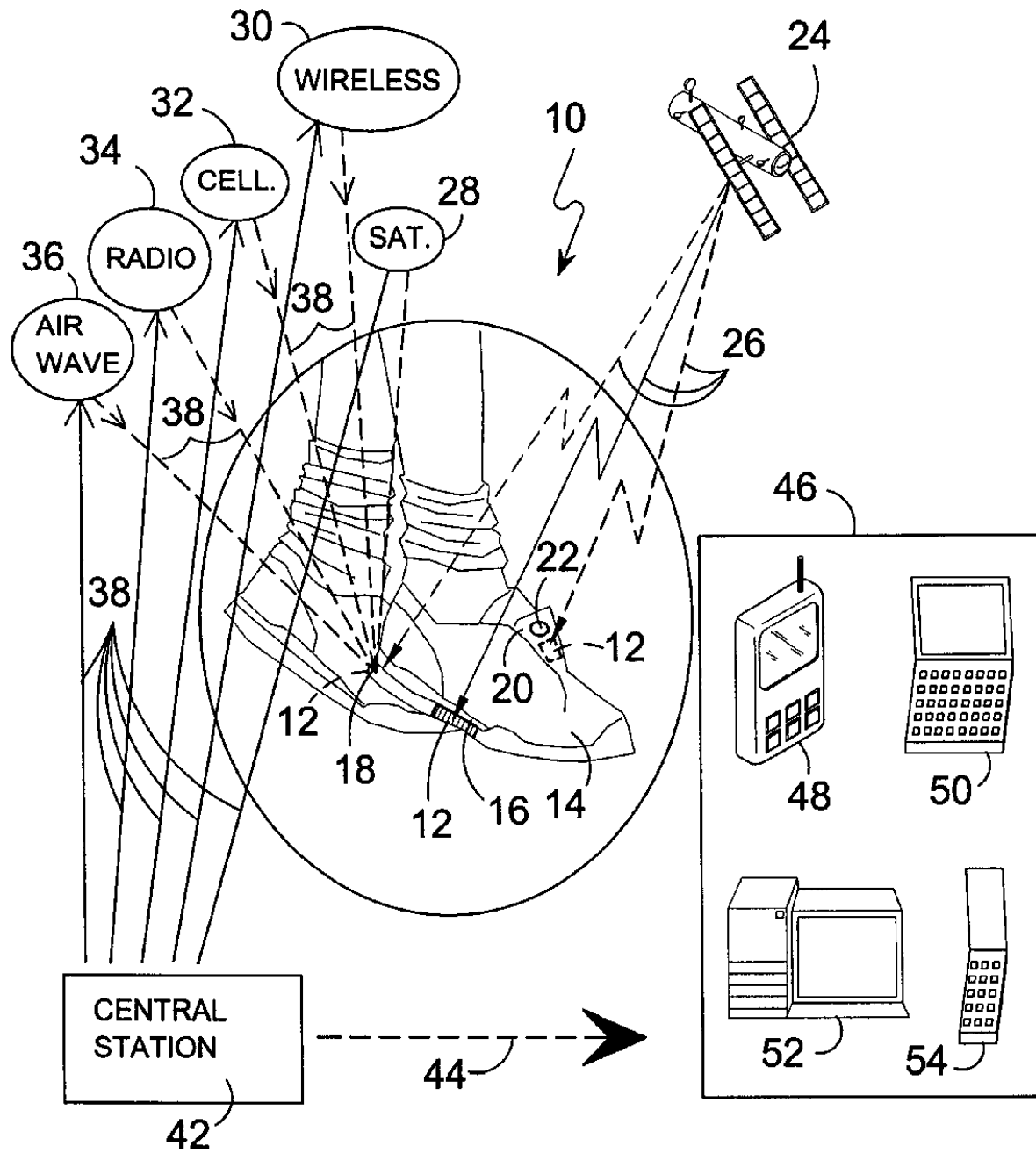
(74) *Attorney, Agent, or Firm*—Michael I. Kroll

(57) **ABSTRACT**

The invention discloses a locator unit contained within footwear providing a method for GPS position determination and transmission of said location determination data to a central monitoring station which disseminates the data through the use of proprietary software, wireless communications, land based wire systems and the Internet.

20 Claims, 9 Drawing Sheets





Signal 38.

What is claimed is new and desired to be protected by Letters Patent is set forth in the appended claims:

1. Footwear in combination with location determination means comprising;
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 - a) footwear having a sole with a midsole;
 - b) receiving means for receiving broadcasted location determination signals transmitted by a Global Positioning System and for receiving a transmission from a central station;
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 - c) means for computationally processing location determinations signals;
 - d) transmission means for broadcasting the results of said computational processing; and
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 - e) a socket formed in said midsole for receiving a module containing said receiving means, processing means and transmission means, said module slidable in and out of said midsole so that said module has an outer surface forming part of the sole of said footwear when inserted
60 into said socket, and clips on an outside of said footwear adjacent said socket to prevent said module from coming out of said socket when said footwear is in use.
2. The system as recited in claim 1, wherein said transmission means is wireless.
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3. The system as recited in claim 1, wherein said wireless transmission is intended for receipt by a central station.

Patent Infringement

- **Infringement:** *A product containing ALL elements set out in one of the claims.*
 - **Literal Infringement:** The product containing EVERY element set out in a claim.
 - **By Doctrine of Equivalents** (against ‘design around’, ‘unscrupulous infringer’): “... performs substantially the same function in substantially the same way to achieve substantially the same result”.

• בעל פטנט זכאי למנוע כל אדם זולתו מנצל בלי רשותו או שלא כדין את האמצאה שניתן עליה הפטנט, בין בדרך המוגדרת בתביעות ובין בדרך דומה לכך שיש בה, לנוכח המוגדר באותן התביעות, עיקר האמצאה שהוא נושא הפטנט (להלן - הפרה).

Definition of a Patent

- A patent is a grant by a government to a ‘first to file’ inventor to exclude others from making, importing, selling, offering to sell or using a single patented invention for a limited period.



Government?
Standards?
Non-public prior use?

Geography Limited !!!!



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PENTRU
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The
Patent
Office



特許庁
JAPANESE PATENT OFFICE



רשות הפטנטים



Oficina Española
de Patentes y Marcas



ΟΡΓΑΝΙΣΜΟΣ ΒΙΟΜΗΧΑΝΙΚΗΣ ΙΔΙΟΚΤΗΣΙΑΣ
INDUSTRIAL PROPERTY ORGANISATION

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B
I

- Local patent office
- Local patent attorney
- Formal language
- Local criteria / rights

patent varemerke design
Patentstyret

DETAILED ACTION***Election/Restrictions***

Restriction to one of the following inventions is required under 35 U.S.C. 121:

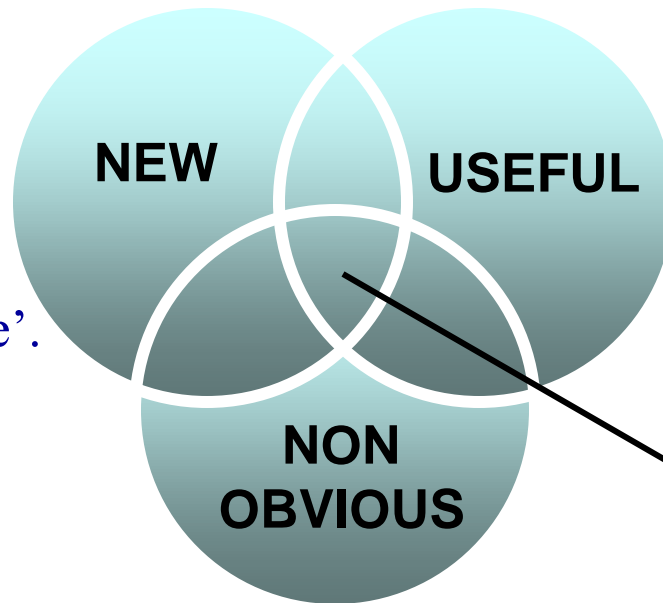
- I. Claims 1-21, 61-70, and 90-101 drawn to details of interface for connecting user to the network, classified in class 370, subclass 463.
- II. Claims 22-32, 44-53 and 102-109 drawn to multiplexing digital data signal with television signal, the multiplexed signal is transmitted over CATV cable, classified in class 348, subclass 14.04.
- III. Claims 33-43, 54-60, 71-89, and 110-117, drawn to multiplexing combined with demultiplexing, classified in class 370, subclass 535.
- IV. Claims 118-168, drawn to bidirectional broadcast and distribution in an optical system, classified in class 398, subclass 67.
- V. Claims 169-177, drawn to wireless interface attached device, classified in class 455, subclass 557.
- VI. Claims 178-189, drawn to combining and distributing information via frequency channels, classified in class 370, subclass 480.

The inventions are distinct, each from the other because of the following reasons:

Inventions I, II and IV are directed to an unrelated product and process. Product and process inventions are unrelated if it can be shown that the product cannot be used in, or made by, the process. See MPEP § 802.01 and § 806.06. In the instant case, the

Patentability

- Public disclosed.
- Worldwide.
- By anyone / inventor.
- Prior to 'Priority Date'.



- ANY useful benefit

- Anyone skilled in the art

• Economics, stupidity, implementing.... – NOT RELEVANT !!!!

Patentability

. אמצאה כשירת פטנט - מהי? (תיקון: תש"ס)

אמצאה, בין שהיא מוצר ובין שהיא תהליך בכל תחום טכנולוגי, שהיא חדשה, מועילה, ניתנת לשימוש תעשייתי ויש בה התקדמות המצאתית - היא אמצאה כשירת פטנט.

4. אמצאה חדשה - מהי?

אמצאה, נחשבת לחדשה, אם לא נתפרסמה בפומבי, בין בישראל ובין מחוצה לה, לפני תאריך הבקשה -

(1) על ידי תיאור, בכתב או במראה או בקול או בדרך אחרת, באופן שבעל-מקצוע יכול לבצע אותה לפי פרטי התיאור;

(2) על ידי ניצול או הצגה, באופן שבעל-מקצוע יכול לבצע אותה לפי הפרטים שנודעו בדרך זו.

5. התקדמות המצאתית - מהי?

התקדמות המצאתית היא התקדמות שאינה נראית כעניין המובן מאליו לבעל-מקצוע ממוצע על סמך הידיעות שכבר נתפרסמו, לפני תאריך הבקשה, בדרכים האמורות בסעיף 4.

Patentability

(12) **United States Patent**
Nemeth

(10) **Patent No.:** US 6,834,453 B1
 (45) **Date of Patent:** Dec. 28, 2004

(54) **HEAD MOUNTED LETTER "M" DISPLAY**

6,012,174 A * 1/2000 Rech et al. 2/200.1
 D449,424 S * 10/2001 Decker et al. 12/2000

(76) **Inventor:** Richard Eric Nemeth, 2367 NE. John
 Carlson Rd., Bremerton, WA (US)
 98311

OTHER PUBLI

Foam Bath Stickers, 1996, Lill

(*) **Notice:** Subject to any disclaimer, the term of this
 patent is extended or adjusted under 35
 U.S.C. 154(b) by 374 days.

* cited by examiner

Primary Examiner—Cassandra
 (74) *Attorney, Agent, or Firm*—

(21) **Appl. No.:** 09/669,150

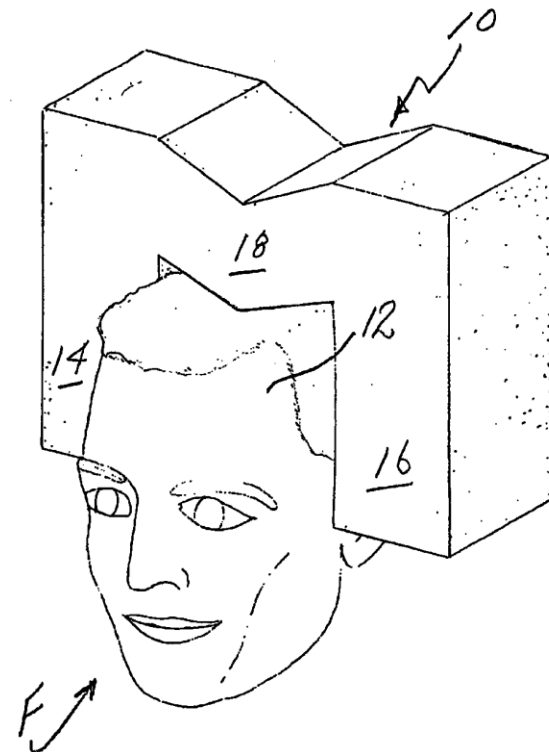
(57) **ABSTR**

(22) **Filed:** Sep. 25, 2000

A foam body is made in the 1
 portions of the foam body i

(51) **Int Cl 7**

CLASS



Patentability

United States Patent [19]
Chamberlain

[11] **Patent Number:** **6,068,649**
[45] **Date of Patent:** **May 30, 2000**

[54] **PACIFIER SECURING SYSTEM** 5,819,731 10/1998 Dyrud et al. 128/207.11

[76] **Inventor:** **Constance Chamberlain**, 14475
Maplewood St., Poway, Calif. 92064

Primary Examiner—Gary Jackson
Assistant Examiner—William W. Lewis

[21] **Appl. No.:** **09/311,415**

[22] **Filed:** **May 13, 1999**

[51] **Int. Cl.⁷** **A61J 17/00**

[52] **U.S. Cl.** **606/234**; 128/207.11; 128/207.17

[58] **Field of Search** 606/234–236;
128/206.13, 207.17, 207.11

[56] **References Cited**

U.S. PATENT DOCUMENTS

5,237,988 8/1993 McNeese 128/207.17
5,513,633 5/1996 Islava 128/207.17

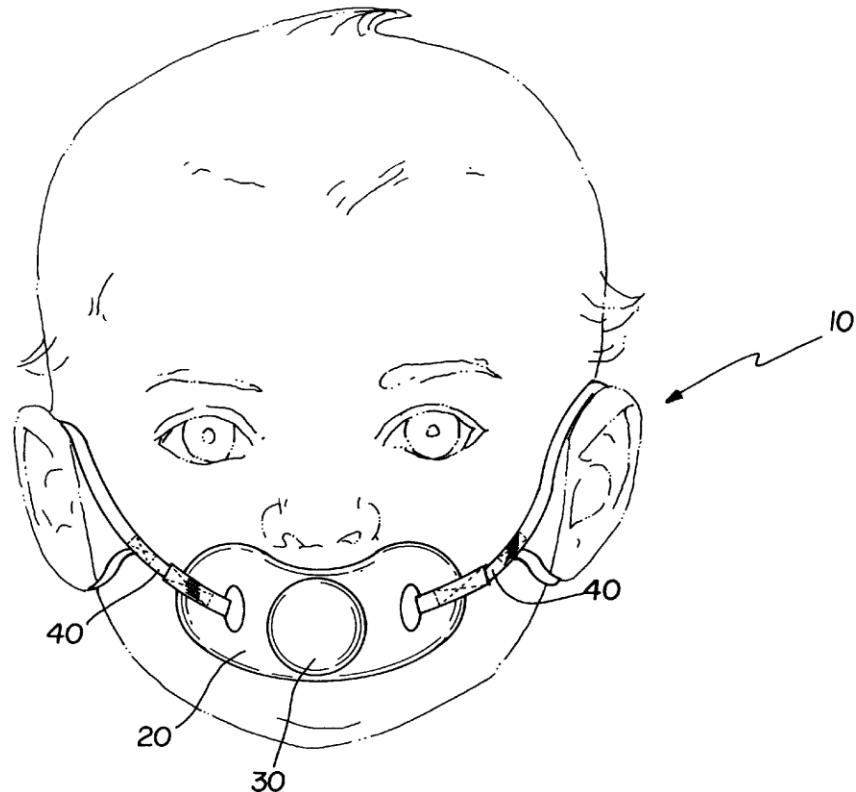


Fig: 3.

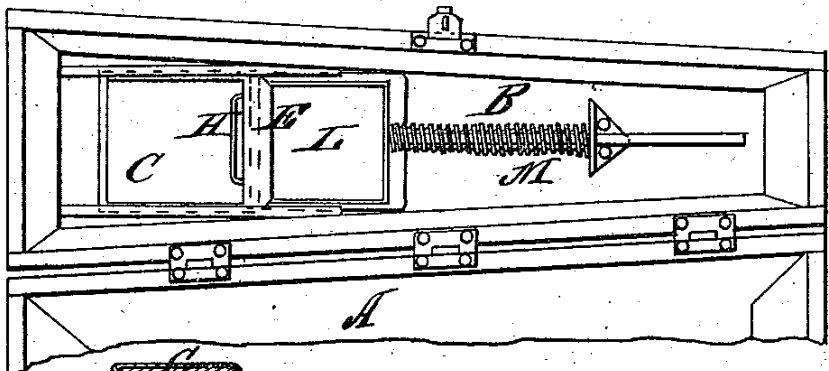
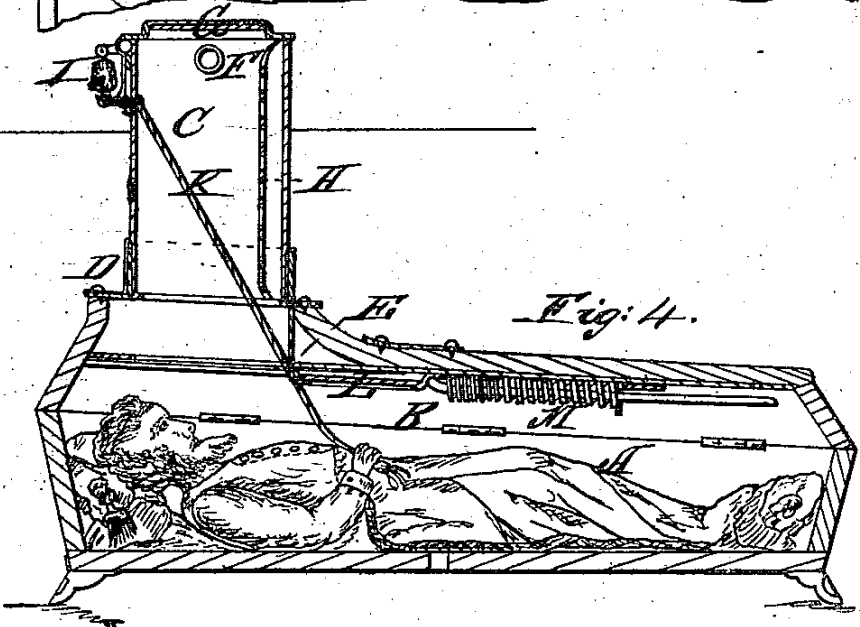


Fig: 4.



No 81,437.

Patented Aug. 25, 1868.

F. Yester.
Coffin.

Patentability

United States Patent

[11] 3,552,388

[72] Inventor **Thomas V. Zelenka**
Hanford, Calif. (205 S. Lemoore Ave.,
Lemoore, Calif., 93245)

[21] Appl. No. **774,081**

[22] Filed **Nov. 7, 1968**

[45] Patented **Jan. 5, 1971**

[56]	References Cited
UNITED STATES PATENTS	
2,062,299 12/1936	Erickson 128/35X
3,403,674 10/1968	Alimanestiano..... 128/61
3,424,149 1/1969	Fujimoto 128/55

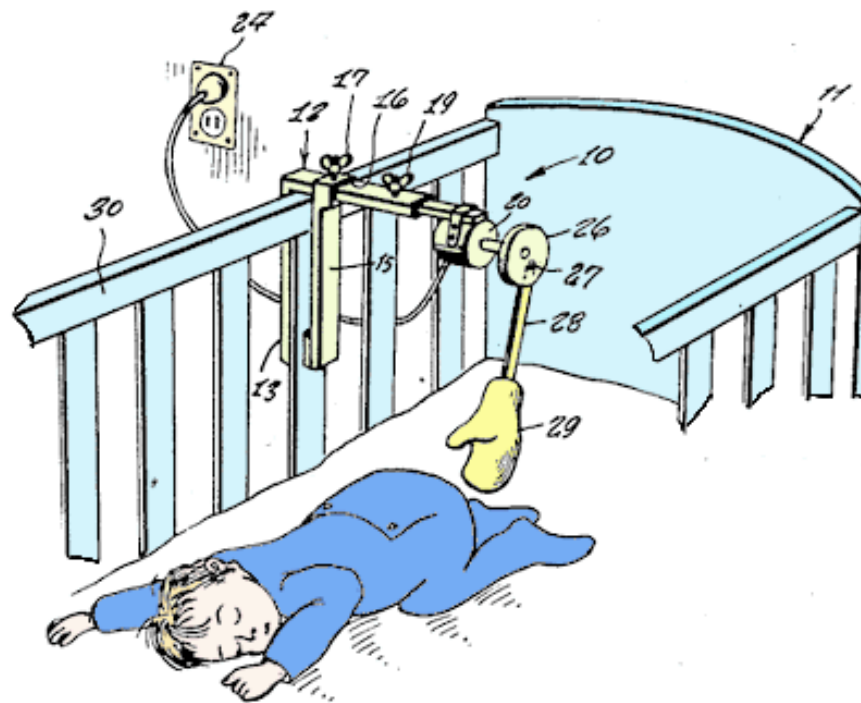
Primary Examiner—L. W. Trapp

[54] **BABY PATTING MACHINE**
4 Claims, 2 Drawing Figs.

[52] U.S. Cl. **128/55,**
128/56, 128/61

[51] Int. Cl. **A61h 23/00**

[50] Field of Search..... **128/54-**
—56, 61; 46/243, 245; 231/1; 35/22, 23



[54] **THUMB-SUCKING DISCOURAGEMENT DEVICE**

[76] Inventors: **Michael Pace; Alice L. Pace, 661 Sherwood Dr. B-1, both of Jonesboro, Ga. 30236; Frank Van Haltern, 1670 Montcliff Ct., Decatur, Ga. 30033**

[21] Appl. No.: **233,918**

[22] Filed: **Feb. 12, 1981**

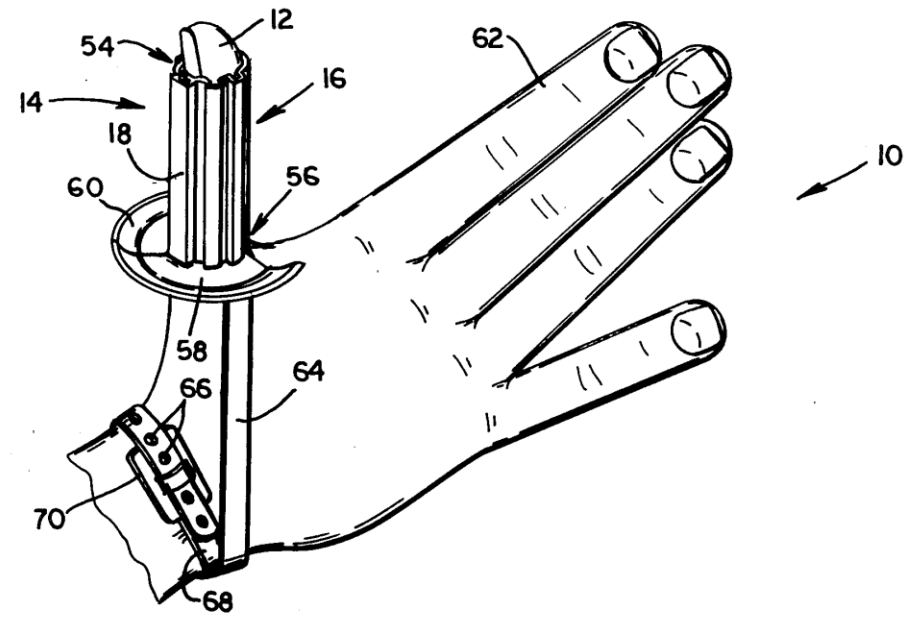
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[52] U
[58] F
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1,929,318	10/1933	Klosky	128/133
2,303,675	12/1942	Berghs	128/133
2,617,413	11/1952	Belknap	128/133
2,633,126	3/1953	Newmark	128/133
2,798,482	7/1957	Feeney	128/133
3,415,244	12/1968	Block	128/133

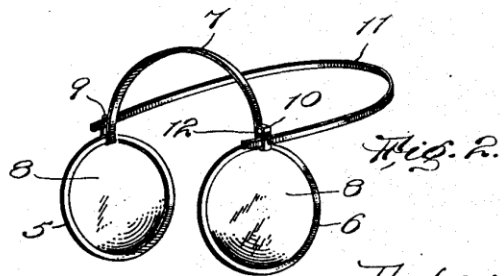
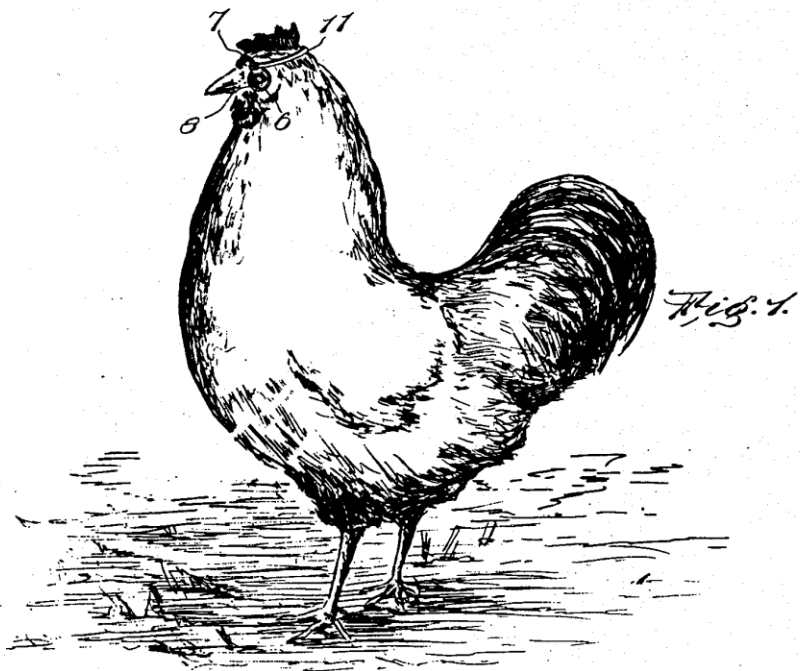
Primary Examiner—Michael H. Thaler
Assistant Examiner—C. W. Shedd
Attorney, Agent, or Firm—Jones & Askew

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33



A. JACKSON, JR.
EYE PROTECTOR FOR CHICKENS.
APPLICATION FILED DEC. 10, 1902.

NO MODEL.



Inventor.

Andrew Jackson, Jr.

Witnesses

Charles ...

1899

Charles ...

Inventorship / Ownership

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

(10) **Patent No.:** **US 7,627,343 B2**
 (45) **Date of Patent:** ***Dec. 1, 2009**

(54) **MEDIA PLAYER SYSTEM**

(75) Inventors: **Anthony M. Fadell**, Portola Valley, CA (US); **Stephen Paul Zadesky**, San Carlos, CA (US); **John Benjamin Filson**, Los Altos, CA (US)

(73) Assignee: **Apple Inc.**, Cupertino, CA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 427 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: **10/423,490**

OTHER PUBLICATIONS

Co-Pending U.S. Appl. No. 11/875,661; Co-Pending U.S. Appl. No. 12/238,278; Co-Pending U.S. Appl. No. 12/394,459; Co-Pending U.S. Appl. No. 12/418,439; Co-Pending U.S. Appl. No. 11/875,638.*

(Continued)

Primary Examiner—George Eng

Assistant Examiner—Brandon J Miller

(74) *Attorney, Agent, or Firm*—Townsend and Townsend and Crew LLP

(57) **ABSTRACT**

A media player system is disclosed. One aspect of the media player system pertains to a docking station that allows a

Patent = Asset

המצאת עובד

- עובד חייב לדווח למעבידו על כל המצאה ו/או בקשת פטנט שהגיע אליה עקב שירותו או בתקופת שירותו (דרישה גורפת!).
- המצאה של עובד, שהגיע אליה עקב שירותו ובתקופת שירותו, היא קניינו של המעביד(!), אלא אם הלה ויתר עליה תוך שישה חודשים מיום שקיבל ההודעה על ההמצאה.
- Sub-contractors, consultants ?????

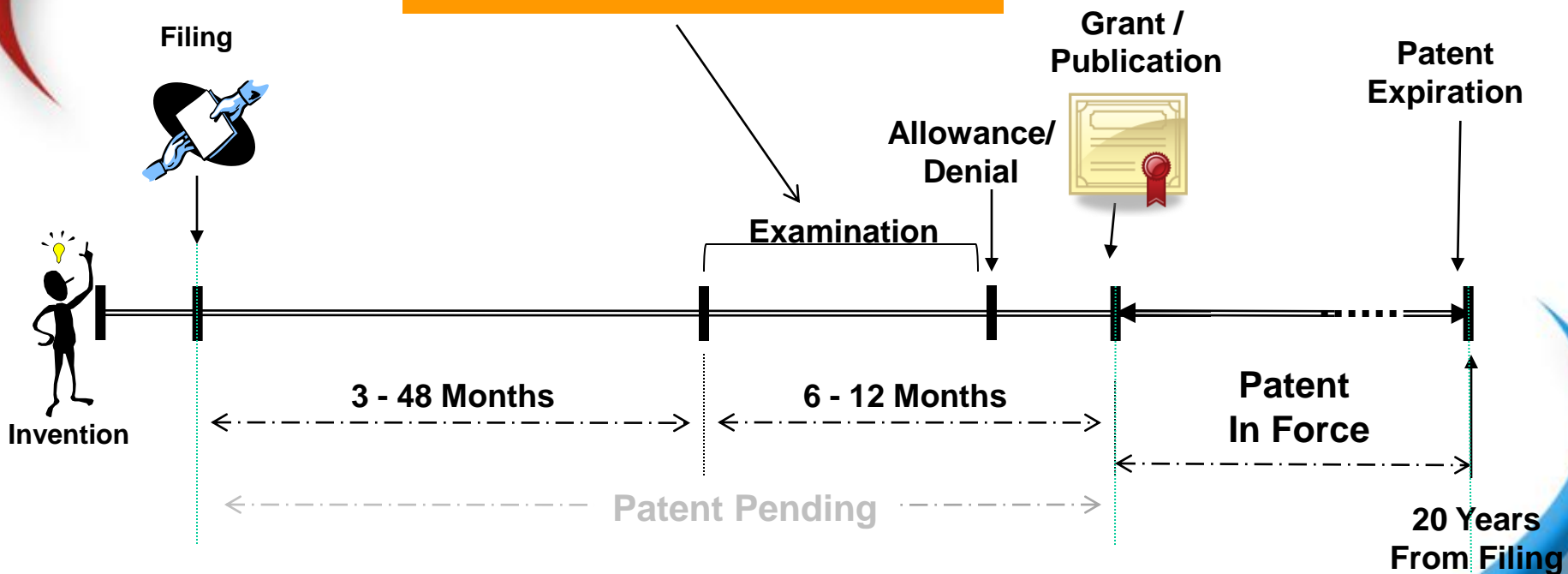
Important Terms

- Claims (Apparatus / method)
- Specification / Description
- Enablement / disclosure
- Prior-Art
- Assignor / Assignee / Assignment

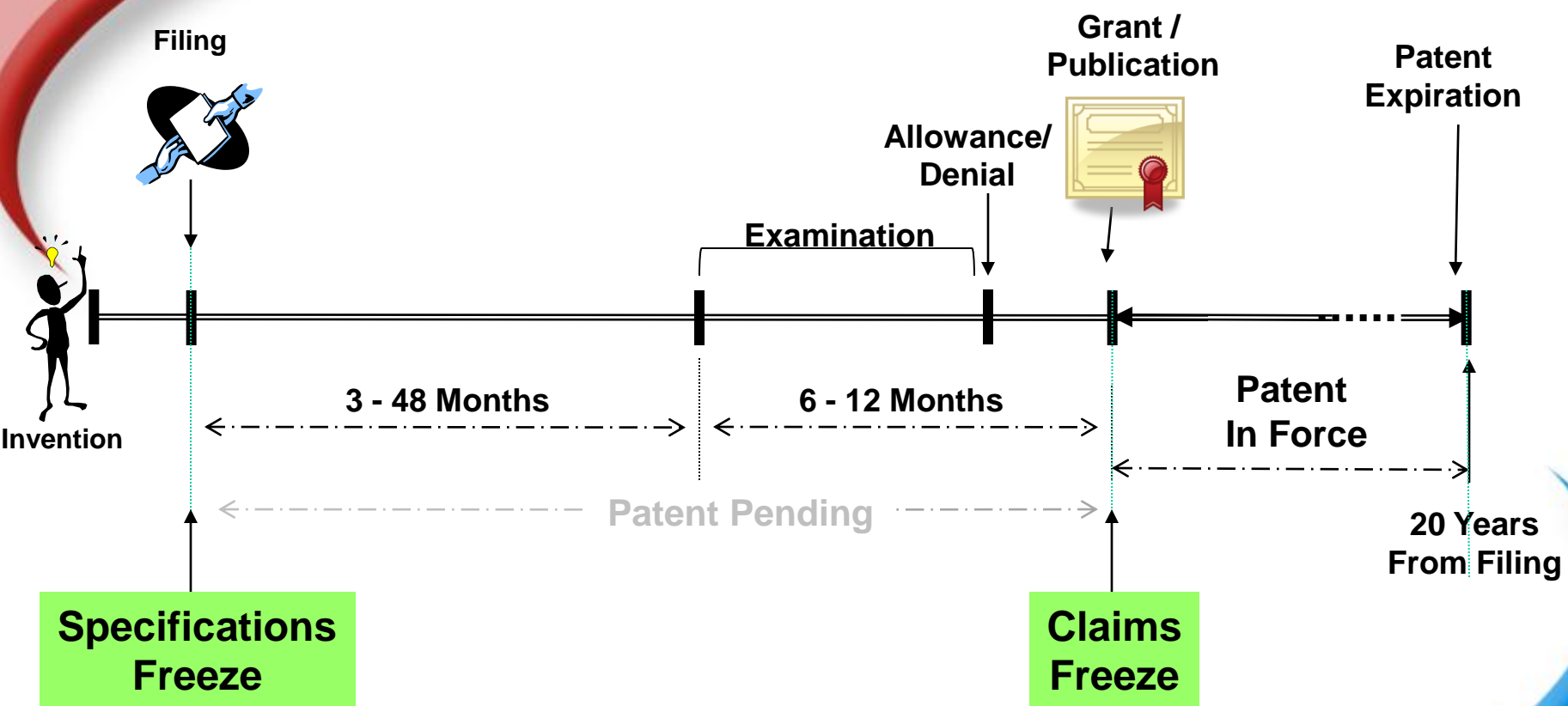
Patent Trail

Examination of:

- 1. Patentable matter**
- 2. Formalities**
- 3. New + Useful + Non-Obvious**



Patent Trail



Accelerated Examination

- **Specific technologies (e.g. green, AIDS)**
- **Inventor age**
- **Potential infringement**
- **Special payments**
- **Investment for production facilities**
- **Others...**

(12) United States Patent Grove

(10) Patent No.: **US 6,778,811 B1**
(45) Date of Patent: **Aug. 17, 2004**

(54) ELECTRONIC DEVICE WITH CONCEALED FIREARM SYSTEM

(76) Inventor: **Ken Grove**, P.O. Box 8502, Clearwater, FL (US) 33758

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 601 days.

(21) Appl. No.: **09/877,454**
(22) Filed: **Jun. 8, 2001**

Related U.S. Application Data

(63) Continuation-in-part of application No. 09/283,721, filed on Apr. 1, 1999, now abandoned.
(51) Int. Cl.⁷ **F41H 9/00**
(52) U.S. Cl. **455/66.1; 455/1; 42/1.09; 42/1.16; 42/1.01; 224/539**
(58) Field of Search **455/1, 66.1; 42/1.01, 42/1.09, 1.16, 70.11, 84; 224/539**

(56) References Cited

U.S. PATENT DOCUMENTS

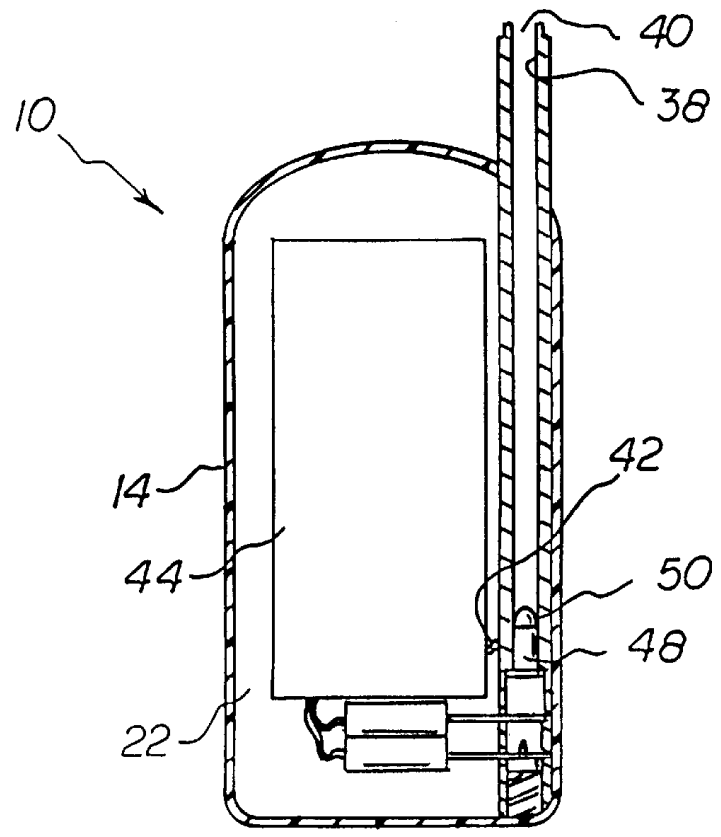
5,511,711 A	*	4/1996	Kunz	224/539
5,782,025 A	*	7/1998	Yoder	42/1.09
5,988,450 A	*	11/1999	Cassarino	222/192
6,321,478 B1	*	11/2001	Klebes	42/84

* cited by examiner

Primary Examiner—Nick Corsaro
Assistant Examiner—Alan T. Ganty
(74) Attorney, Agent, or Firm—Edward P. Dutkiewicz

(57) ABSTRACT

A
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4 Claims, 5 Drawing Sheets

Where to file ?

- **As a minimum – Per the business plan.**
 - Use, sell and import (End Market).
 - Make (Manufacturing).
 - Develop (R&D).
- Common filings:
 - US, Europe (Germany, UK, France), Israel, Canada, Far-east (Japan, Korea, China).



Regional Filing Offices

- **EPC/EPT/EPO (European Patent Office)**

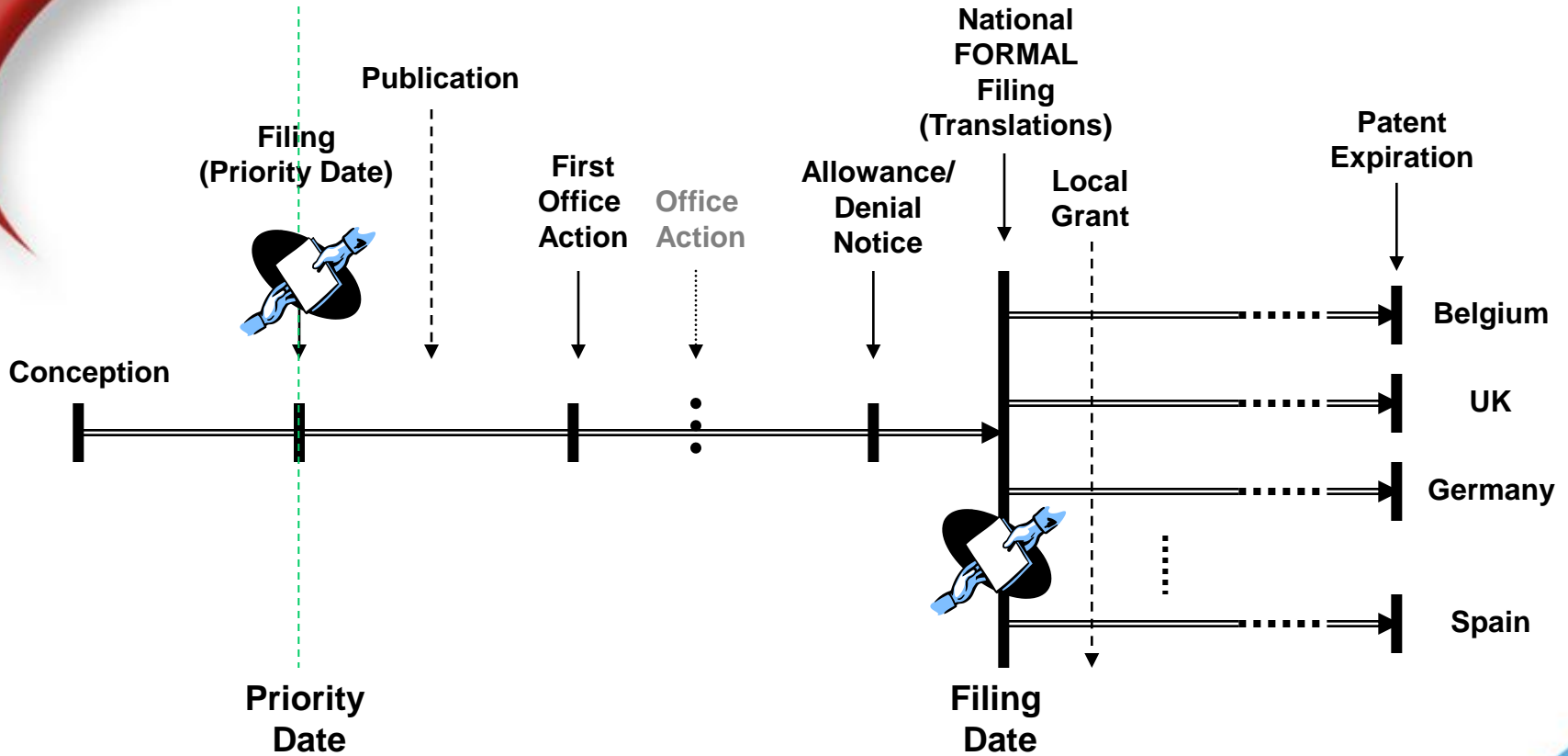


35 member states

**Austria • Belgium • Bulgaria • Croatia •
 Cyprus • Czech Republic • Denmark •
 Estonia • Finland • France • Germany •
 Greece • Hungary • Iceland • Ireland •
 Italy • Latvia • Liechtenstein • Lithuania •
 Luxembourg • Former Yugoslav
 Republic of Macedonia • Malta •
 Monaco • Netherlands • Norway •
 Poland • Portugal • Romania • Slovakia •
 Slovenia • Spain • Sweden •
 Switzerland • Turkey • United Kingdom**



Patent Trail



Regional Filing Offices

- **ARIPO**



- 15 English-speaking African countries.
- Botswana, The Gambia, Ghana, Kenya, Lesotho, Malawi, Mozambique, Namibia, Sierra Leone, Sudan, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe.



- **OAPI**



- 16 French-speaking African countries.
- Burkina-Faso, Benin, Congo, Cote d'Ivoire, Cameroon, Gabon, Guinea, Mali, Mauritania, Niger, Senegal, Chad, Togo.



- **GCC**



- 6 Gulf region countries.
- Bahrain, Kuwait, Oman, Qatar, Saudi-Arabia and United Arab Emirates.

- **Eurasian.**

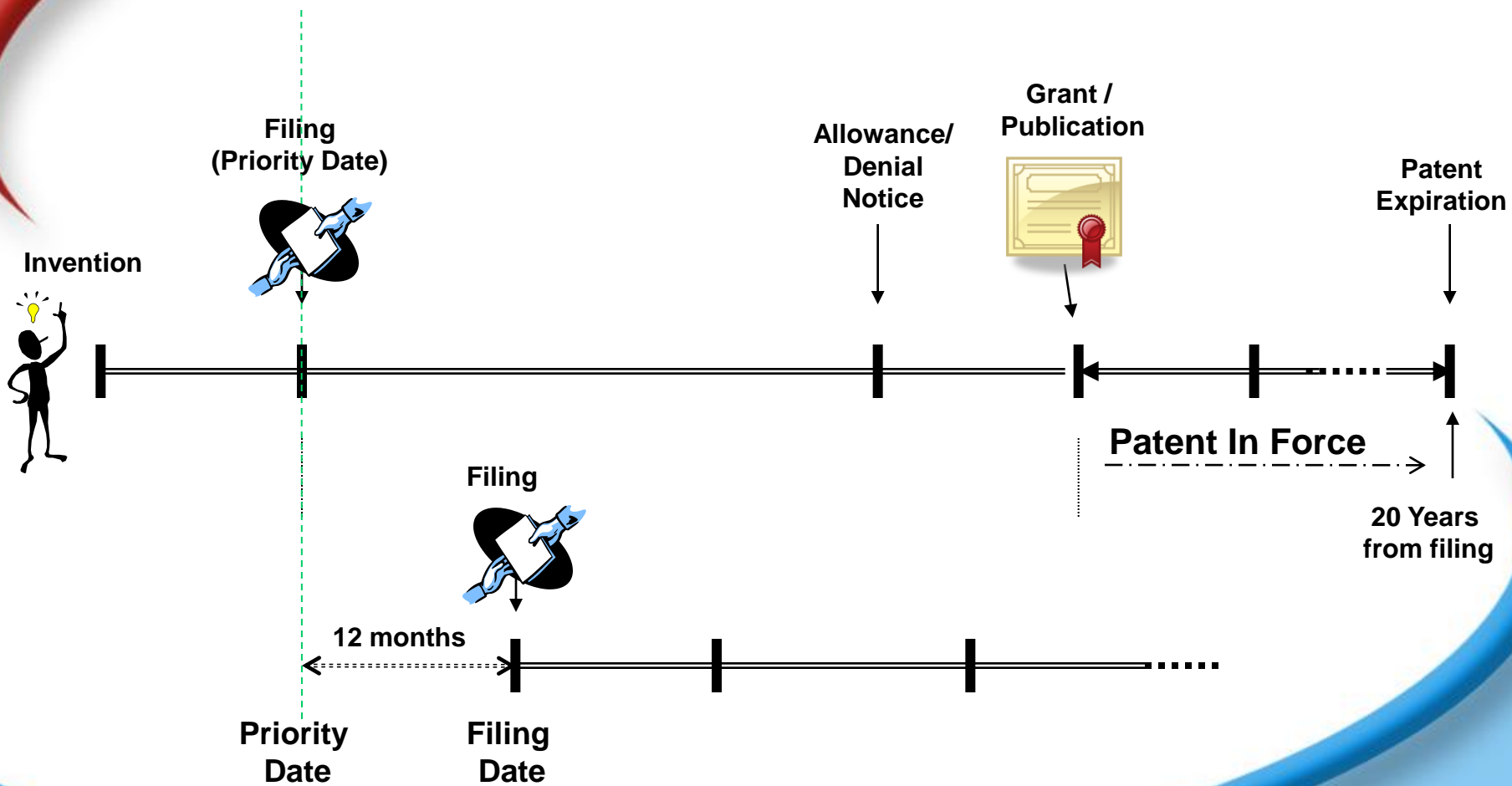


- 9 Former U.S.S.R countries.



- Armenia, Azerbaijan, Belarus, Kyrgyzstan, Kazakhstan, Moldova, Russia, Tajikistan, Turkmenistan.

Paris Convention



Paris Convention

United States Patent [19]	[11] Patent Number:	5,896,389
Kobayashi et al.	[45] Date of Patent:	Apr. 20, 1999

[54] **COMPOUND TRANSMISSION SYSTEM FOR COMPOUNDING LAN AND OTHER COMMUNICATION CHANNELS**

[75] **Inventors: Yoshikazu Kobayashi; Tatsuya Kato, both of Tokyo, Japan**

[73] **Assignee: NEC Corporation, Tokyo, Japan**

[21] **Appl. No.: 08/621,195**

[22] **Filed: Mar. 21, 1996**

[30] **Foreign Application Priority Data**
 Mar. 27, 1995 [JP] Japan 7-066615

[51] **Int. Cl.⁶ H04M 7/00**

[52] **U.S. Cl. 370/527; 370/529; 340/310.07; 455/3.3**

[58] **Field of Search 370/434, 463, 370/527, 529; 340/310.01, 310.07; 455/3.3; 375/257, 258**

Primary Examiner—Chi H. Pham
Assistant Examiner—Ricky Ngo
Attorney, Agent, or Firm—Sughrue, Mion, Zinn, Macpeak & Seas, PLLC

[57] **ABSTRACT**

A compound transmission system compounds signals from a LAN communication device and other communication devices without multiplex them. A first LAN communication device is connected to a second LAN communication device through two line pairs (10, 20). A first signal transmission device such as an exchanger (111) is connected to center taps of windings of transformers (50, 51) on the side of the line pairs to superpose a communication signal from the first signal transmission device on the LAN signal and separate a telephone communication signal from the LAN signal at the center taps. The transformers (50, 51) constitute a first superpose/separate circuit. A second signal transmission

Paris Convention

(19) **United States**

(12) **Patent Application Publication**
Ashida et al.

(10) **Pub. No.: US 2008/0015017 A1**

(43) **Pub. Date: Jan. 17, 2008**

(54) **GAME CONTROLLER**

(75) Inventors: **Kenichiro Ashida**, Kyoto City (JP);
Junji Takamoto, Kyoto City (JP);
Masato Ibuki, Kyoto-City (JP); **Shinji Yamamoto**, Kyoto-City (JP); **Daisuke Kumazaki**, Kyoto-City (JP); **Fumiyoshi Suetake**, Kyoto-City (JP); **Akiko Suga**, Kyoto-City (JP)

Correspondence Address:
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901 NORTH GLEBE ROAD, 11TH FLOOR
ARLINGTON, VA 22203 (US)

(73) Assignee: **Nintendo Co., Ltd.**, Kyoto-shi (JP)

(21) Appl. No.: **11/790,780**

(22) Filed: **Apr. 27, 2007**

(30) Foreign Application Priority Data

May 9, 2006 (JP) 2006-129732

Publication Classification

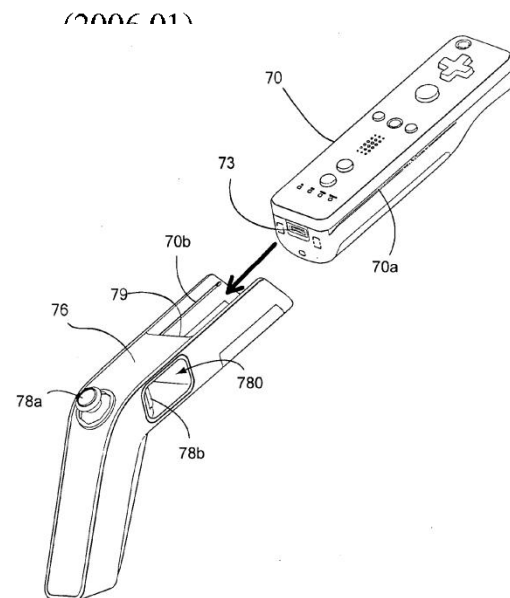
(51) **Int. Cl.**

A63F 9/24

(52) **U.S. Cl.**

(57)

A video game control assembly may include housing formed with : least the top having a and a base portion prov having a shape substan ing in the video game sub-unit with a barrel open slot adapted to re



Paris Convention

US 20050249245A1

(19) **United States**

(12) **Patent Application Publication**

Hazani et al.

(10) **Pub. No.: US 2005/0249245 A1**

(43) **Pub. Date: Nov. 10, 2005**

(54) **SYSTEM AND METHOD FOR CARRYING A WIRELESS BASED SIGNAL OVER WIRING**

(75) Inventors: **Ami Hazani**, Ra'anana (IL); **Shlomo Butbul**, Ra'anana (IL); **Yehuda Binder**, Hod Hasharon (IL)

Correspondence Address:
BROWDY AND NEIMARK, P.L.L.C.
624 NINTH STREET, NW
SUITE 300
WASHINGTON, DC 20001-5303 (US)

(73) Assignee: **Serconet Ltd.**, Ra'anana (IL)

(21) Appl. No.: **11/066,442**

(22) Filed: **Feb. 28, 2005**

(30) **Foreign Application Priority Data**

May 6, 2004 (IL) 161869

Publication Classification

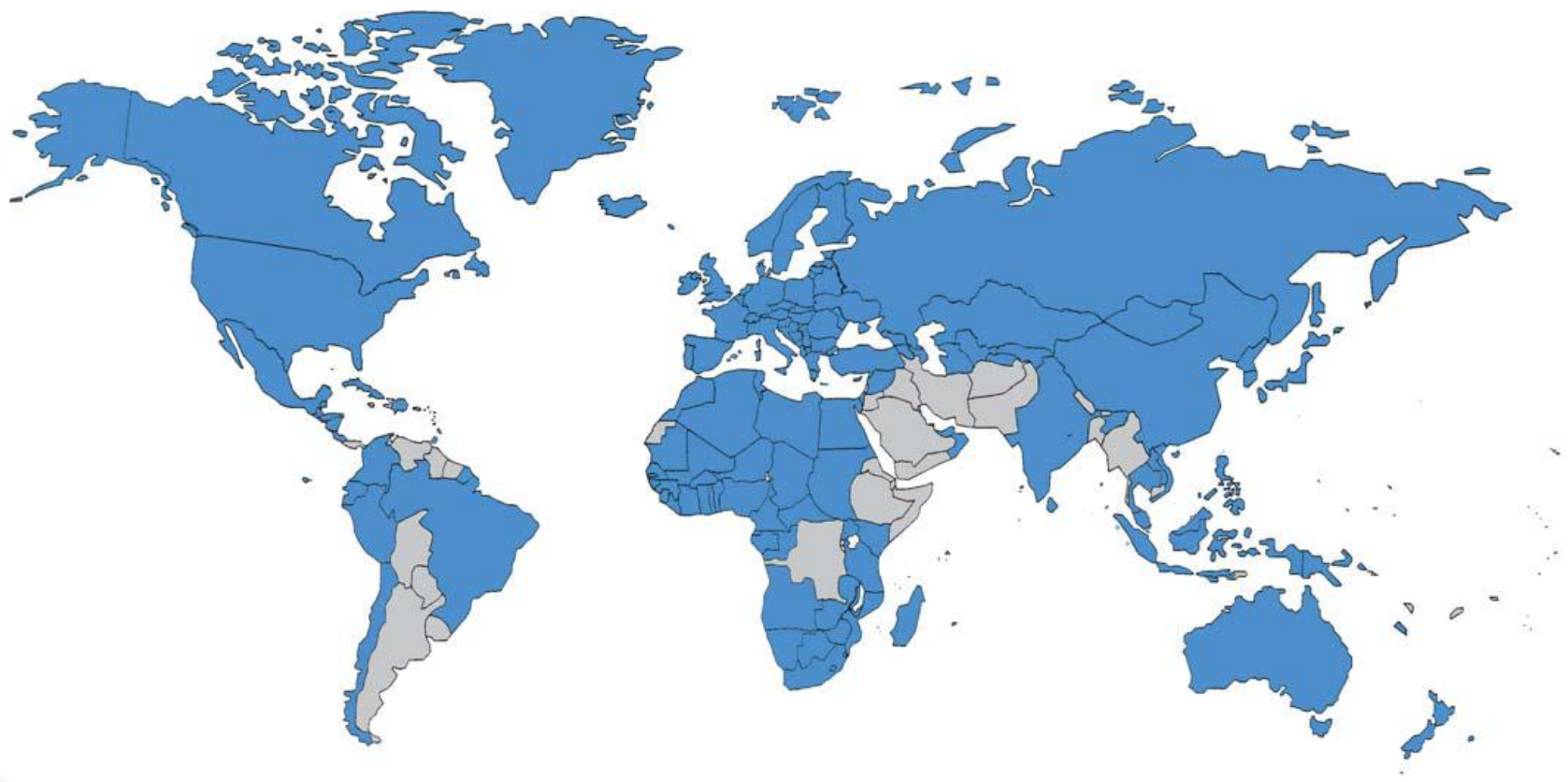
(51) **Int. Cl.⁷** **H04L 12/66**; H04J 1/00; H04H 1/04

(52) **U.S. Cl.** **370/485**; 370/487

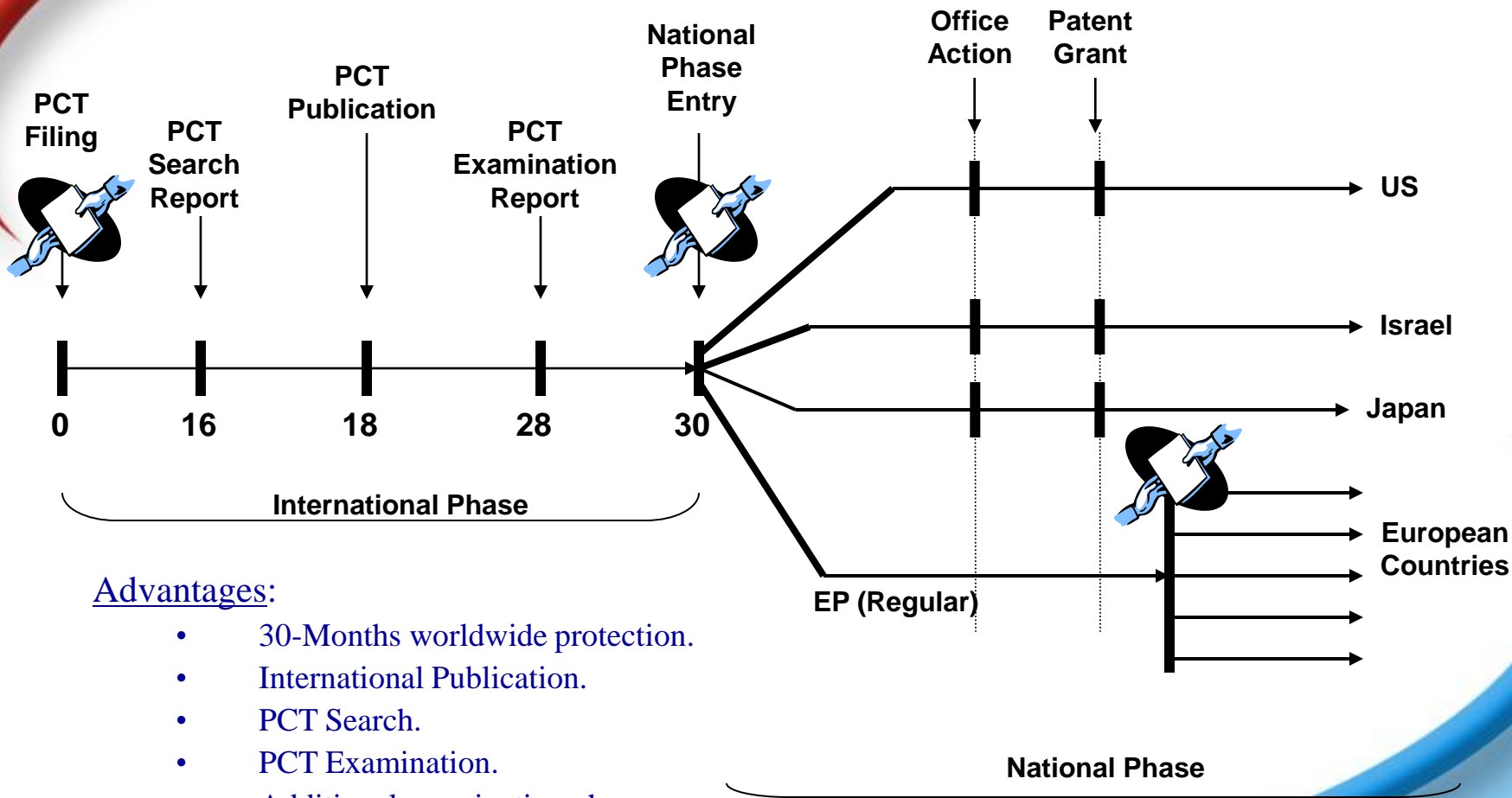
(57) **ABSTRACT**

A device, network and method wherein a standard wireless modem is coupled to wiring for carrying a wireless baseband signal that may be OFDM based, and may be directly generated by the wireless IF modem, or extracted from the modem RF signal. The wiring may be a building utility wiring, such as telephone, AC power or CATV wiring. The baseband signal is carried simultaneously with the utility service signal over the utility wiring using Frequency Division Multiplexing. The device may be enclosed with a data unit, a standalone dedicated enclosure, within an outlet or as a plug-in outlet adapter. Data units may couple the device by a wiring port such as standard data connector, or via wireless connection. The device may be locally powered or via a power signal carried over the wiring. This abstract is not intended to limit or construe the scope of the claims.

Patent Cooperation Treaty (PCT) Countries



PCT Chapter II Route



Advantages:

- 30-Months worldwide protection.
- International Publication.
- PCT Search.
- PCT Examination.
- Additional examination phases.
- Automatic European approval.

PCT

US 2005/0129069 A1

(19) **United States**
 (12) **Patent Application Publication**
Binder

(10) **Pub. No.: US 2005/0129069 A1**
 (43) **Pub. Date: Jun. 16, 2005**

(54) **PRIVATE TELEPHONE NETWORK
 CONNECTED TO MORE THAN ONE
 PUBLIC NETWORK**

(52) **U.S. Cl. 370/493**

(76) **Inventor: Yehuda Binder, Hasharon (IL)**

(57) **ABSTRACT**

Correspondence Address:
BROWDY AND NEIMARK, P.L.L.C.
624 NINTH STREET, NW
SUITE 300
WASHINGTON, DC 20001-5303 (US)

In conjunction with a data communication network (53) carrying multiple telephony signals and allowing for connection of telephone sets (17), a system and method in which two external feeders (55a, 55b) connect to the data network (53) at two distinct points via two distinct devices. The data network can be based on dedicated wiring or can use existing in premises medium such as telephone, powerlines or CATV wiring. In the latter case, the wiring can still carry the original service for which it was installed. The external telephone connections can be based on the traditional PSTN, CATV network, cellular telephone network or any other telephone service provider network, using specific adapter for any medium used. In the case of connection to a POTS telephone signal, VoIP gateway (or any other converter) is required.

(21) **Appl. No.: 10/492,411**

(22) **PCT Filed: Feb. 24, 2004**

(86) **PCT No.: PCT/IL04/00178**

(30) **Foreign Application Priority Data**

Mar. 13, 2003 (IL) 154921

Publication Classification

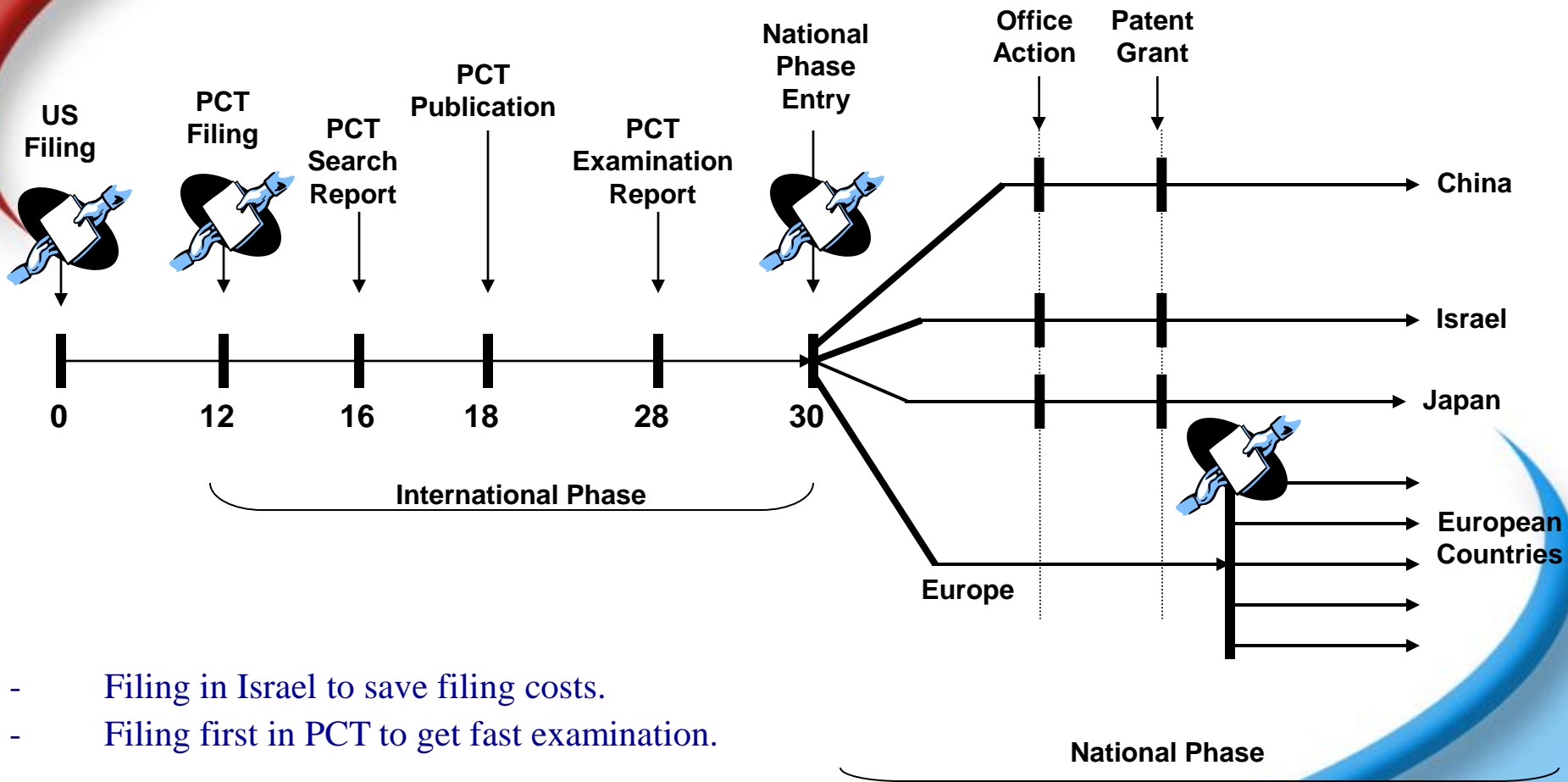
(51) **Int. Cl.⁷ H04J 1/02**

Patent Associated Costs

- **Search – \$500 - \$3,000**
- **Application preparation - \$5000 - \$30,000**
- **Translation - \$5,000- \$20,000**
- **Filing Fees**
 - **PCT or EPO: \$5,000 - \$10,000**
 - **Other countries: \$500 - \$2,000**
- **Response to Office Action - \$300 - \$2,000**
- **Issue Fee – \$500 - \$3,000**
- **Maintenance Fees - \$500 – \$2,000**
- <http://www.moital.gov.il/NR/exeres/6BD93006-D1F7-4244-BD58-6C5DC05A5DF,frameless.htm> (תנופה)



Suggested Trail



- Filing in Israel to save filing costs.
- Filing first in PCT to get fast examination.

Suggested Trail

(12) **United States Patent Binder**

(10) **Patent No.:** US 7,522,615 B2
 (45) **Date of Patent:** Apr. 21, 2009

(54) **ADDRESSABLE OUTLET, AND A NETWORK USING SAME**

3,872,319 A 3/1975 Platzter
 3,959,772 A 5/1976 Wakasa et al.
 4,272,759 A 6/1981 Handy

(75) Inventor: **Yehuda Binder**, Hod Hasharon (IL)

(73) Assignee: **Serconet, Ltd.**, Ra'anana (IL)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 1287 days.

(Continued)

FOREIGN PATENT DOCUMENTS

EP 0 200 016 A2 11/1986

(21) Appl. No.: **10/491,989**

(22) PCT Filed: **Nov. 12, 2003**

(Continued)

(86) PCT No.: **PCT/IL03/00948**

OTHER PUBLICATIONS

§ 371 (c)(1),
 (2), (4) Date: **Apr. 7, 2004**

Grayson Evans, *The CEBUs Standard User's Guide*, 1st edition, May 1996, 317 pages.

(Continued)

(87) PCT Pub. No.: **WO2004/045151**

PCT Pub. Date: **May 27, 2004**

Primary Examiner—Sam Bhattacharya
 (74) *Attorney, Agent, or Firm*—Browdy and Neimark, P.L.L.C.

(65) **Prior Publication Data**

US 2005/0025162 A1 Feb. 3, 2005

(57) **ABSTRACT**

(30) **Foreign Application Priority Data**

Nov. 13, 2002 (IL) 152824

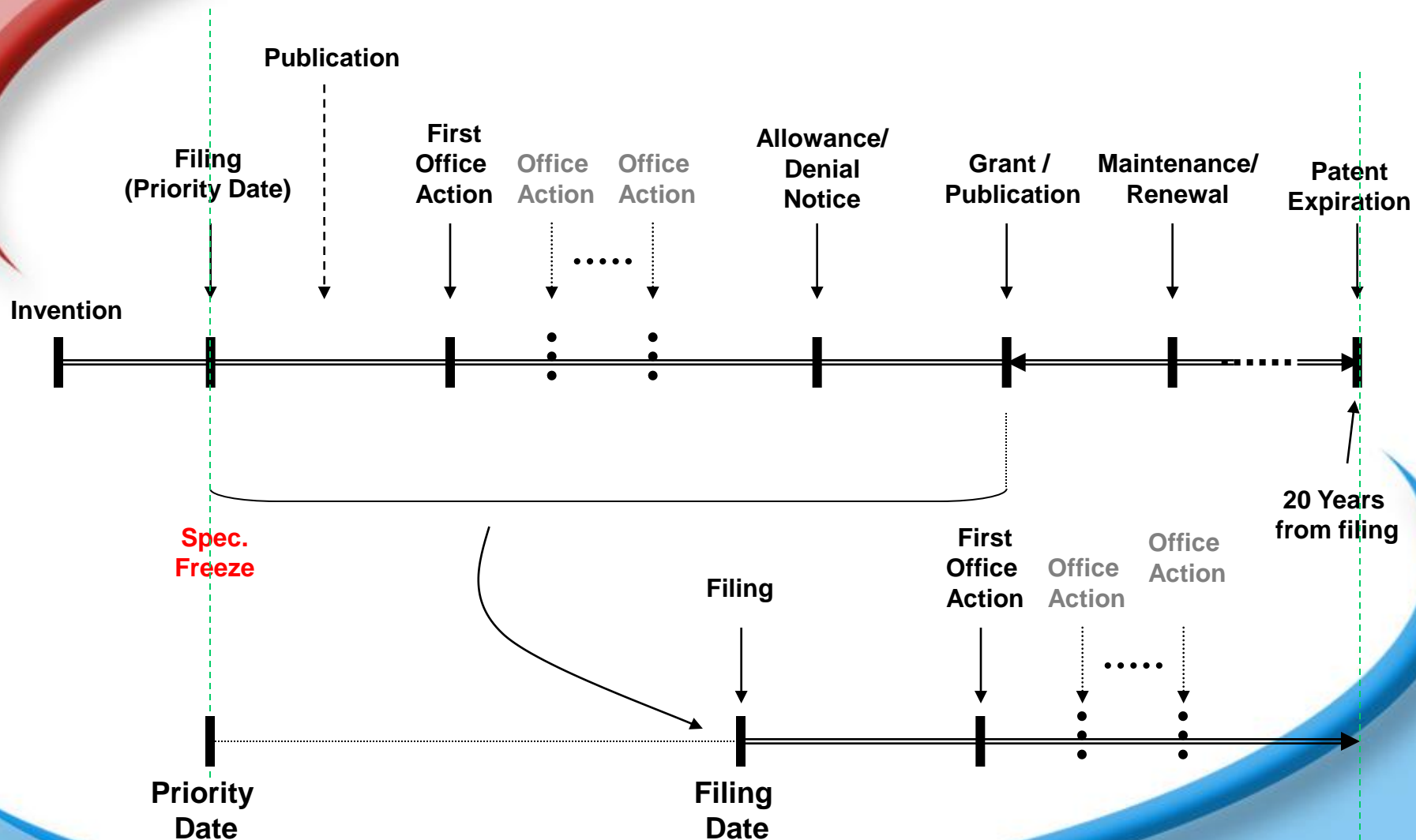
An addressable outlet for use as part of local area network based on wiring installed in a building, such as telephone, electrical, cable television, dedicated wiring, and the like. The use of such wiring for data communications networks in addition to the wiring's primary usage creates a need for ways of determining the condition of the network and monitoring this information remotely. Network condition includes such

(51) **Int. Cl.**
H04L 12/28 (2006.01)

(52) **U.S. Cl.** **370/401; 370/419**

(58) **Field of Classification Search** 370/401

Continuation / Divisional



Same spec. Different claims

Continuation / Divisional

(12) **United States Patent Binder**

(10) **Patent No.: US 6,480,510 B1**

(45) **Date of Patent: Nov. 12, 2002**

(54) **LOCAL AREA NETWORK OF SERIAL INTELLIGENT CELLS**

(75) **Inventor: Yehuda Binder, Hod-Hasharon (IL)**

(73) **Assignee: SerCoNet Ltd., Ra'anana (IL)**

(*) **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.: 09/123,486**

(22) **Filed: Jul. 28, 1998**

(51) **Int. Cl.⁷** **H04J 3/08**; H04M 11/04; H04L 5/14

(52) **U.S. Cl.** **370/502**; 340/310.01; 370/276

(58) **Field of Search** 370/274, 276, 370/285, 293, 295–296, 400–402, 463, 475, 419–420, 501–502, 908, 910–911,

5,311,114 A	*	5/1994	Sambamurthy et al.	370/910
5,311,593 A	*	5/1994	Carmi	370/400
5,351,272 A		9/1994	Abraham	340/310.02
5,404,127 A		4/1995	Lee et al.	340/310.02
5,491,463 A		2/1996	Sargeant et al.	340/310.01
5,504,454 A		4/1996	Daggett et al.	375/328
5,535,336 A		7/1996	Smith et al.	340/825.52
5,579,221 A		11/1996	Mun	340/825.27
5,581,801 A		12/1996	Spriester et al.	725/149
5,684,826 A		11/1997	Ratner	340/310.01

* cited by examiner

Primary Examiner—Ajit Patel

Assistant Examiner—Maikhanh Tran

(74) *Attorney, Agent, or Firm*—Mark M. Friedman

(57) **ABSTRACT**

A serial intelligent cell (SIC) and a connection topology for local area networks using Electrically-conducting media. A local area network can be configured from a plurality of SIC's interconnected so that all communications between

Continuation / Divisional

(12) **United States Patent Binder**

(10) **Patent No.:** **US 7,016,368 B2**

(45) **Date of Patent:** **Mar. 21, 2006**

(54) **LOCAL AREA NETWORK OF SERIAL INTELLIGENT CELLS**

(75) **Inventor:** **Yehuda Binder**, Hod Hasharon (IL)

(73) **Assignee:** **Serconet, Ltd.**, Ra'anana (IL)

(*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 441 days.

4,639,714 A	1/1987	Crowe
4,672,605 A	6/1987	Hustig et al.
4,714,912 A	12/1987	Roberts et al.
4,745,391 A	5/1988	Gajjar
4,755,792 A	7/1988	Pezzolo et al.
4,766,402 A	8/1988	Crane
4,772,870 A	9/1988	Reyes
4,782,322 A	11/1988	Lechner et al.
4,785,448 A	11/1988	Reichert et al.

(Continued)

(21) **Appl. No.:** **10/178,223**

(22) **Filed:** **Jun. 25, 2002**

FOREIGN PATENT DOCUMENTS

DE 33 29 336 A1 12/1983

(Continued)

(65) **Prior Publication Data**

US 2002/0159402 A1 Oct. 31, 2002

Primary Examiner—Chi Pham

Assistant Examiner—Alexander O. Boakye

(74) *Attorney, Agent, or Firm*—Browdy and Neimark, PLLC

Related U.S. Application Data

(63) Continuation of application No. 09/123,486, filed on Jul. 28, 1998, now Pat. No. 6,480,510.

(57) **ABSTRACT**

(51) **Int. Cl.**

H04J 4/00 (2006.01)

(52) **U.S. Cl.** **370/436; 370/502; 370/908**

(58) **Field of Classification Search** **370/478,**

A serial intelligent cell (SIC) and a connection topology for local area networks using Electrically-conducting media. A local area network can be configured from a plurality of SIC's interconnected so that all communications between two adjacent SIC's is both point-to-point and bidirectional.

Continuation / Divisional

(12) **United States Patent Binder**

(10) **Patent No.:** US 7,292,600 B2

(45) **Date of Patent:** *Nov. 6, 2007

(54) **LOCAL AREA NETWORK OF SERIAL INTELLEAGENT CELLS**

FOREIGN PATENT DOCUMENTS

DE 33 29 336 A1 12/1983

(75) Inventor: **Yehuda Binder**, Hod Hasharon (IL)

(73) Assignee: **Serconet Ltd.**, Ra'anana (IL)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 123 days.

This patent is subject to a terminal disclaimer.

(Continued)

OTHER PUBLICATIONS

3ComImpact IQ External ISDN Modem User product brochure; Published Jun. 1996 (4 pages).

(Continued)

(21) Appl. No.: **10/793,769**

Primary Examiner—Chi Pham

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

Assistant Examiner—Alexander O. Boakye

(74) *Attorney, Agent, or Firm*—Browdy and Neimark, PLLC

(65) **Prior Publication Data**

US 2004/0174897 A1 Sep. 9, 2004

(57) **ABSTRACT**

Related U.S. Application Data

(60) Division of application No. 10/178,223, filed on Jun. 25, 2002, which is a continuation of application No. 09/123,486, filed on Jul. 28, 1998, now Pat. No. 6,480,510.

A serial intelligent cell (SIC) and a connection topology for local area networks using Electrically-conducting media. A local area network can be configured from a plurality of SIC's interconnected so that all communications between two adjacent SIC's is both point-to-point and bidirectional. Each SIC can be connected to one or more other SIC's to allow redundant communication paths. Communications in

(51) **Int. Cl.**
H04J 12/66 (2006.01)

Continuation / Divisional

(12) **United States Patent Binder**

(10) **Patent No.:** **US 7,424,031 B2**

(45) **Date of Patent:** ***Sep. 9, 2008**

(54) **LOCAL AREA NETWORK OF SERIAL INTELLIGENT CELLS**

FOREIGN PATENT DOCUMENTS

(75) Inventor: **Yehuda Binder**, Hod Hasharon (IL)

DE 33 29 336 12/1983

(73) Assignee: **Serconet, Ltd.**, Ra'anana (IL)

(Continued)

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

OTHER PUBLICATIONS

This patent is subject to a terminal disclaimer.

EIA-600.31—PL Physical Layer & Medium Specification; pp. 1-24.

(Continued)

(21) Appl. No.: **11/708,545**

Primary Examiner—Chi H. Pham

Assistant Examiner—Alexander Boakye

(22) Filed: **Feb. 21, 2007**

(74) *Attorney, Agent, or Firm*—Browdy and Neimark

(65) **Prior Publication Data**

(57) **ABSTRACT**

US 2007/0147413 A1 Jun. 28, 2007

Related U.S. Application Data

(60) Continuation of application No. 10/793,769, filed on Mar. 8, 2004, now Pat. No. 7,292,600, which is a division of application No. 10/178,223, filed on Jun. 25, 2002, now Pat. No. 7,016,368, which is a continuation of application No. 09/123,486, filed on Jul. 28, 1998, now Pat. No. 6,480,510.

A serial intelligent cell (SIC) and a connection topology for local area networks using Electrically-conducting media. A local area network can be configured from a plurality of SIC's interconnected so that all communications between two adjacent SIC's is both point-to-point and bidirectional. Each SIC can be connected to one or more other SIC's to allow redundant communication paths. Communications in different areas of a SIC network are independent of one another, so that, unlike current bus topology and star topology, there is no fundamental limit on the size or extent of a SIC network. Each

(51) **Int. Cl.**
H04L 12/66 (2006.01)

Continuation / Divisional

(19) **United States**

(12) **Patent Application Publication**
BINDER

(10) **Pub. No.: US 2008/0219288 A1**

(43) **Pub. Date: Sep. 11, 2008**

(54) **LOCAL AREA NETWORK OF SERIAL INTELLIGENT CELLS**

Publication Classification

(75) Inventor: **Yehuda BINDER**, Hod Hasharon (IL)

(51) **Int. Cl.**
H04L 5/14 (2006.01)
H04L 29/10 (2006.01)

Correspondence Address:
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SUITE 300
WASHINGTON, DC 20001-5303 (US)

(52) **U.S. Cl.** **370/463; 370/276**

(57) **ABSTRACT**

(73) Assignee: **Israeli Company of Serconet Ltd.**, Ra'anana (IL)

A serial intelligent cell (SIC) and a connection topology for local area networks using Electrically-conducting media. A local area network can be configured from a plurality of SIC's interconnected so that all communications between two adjacent SIC's is both point-to-point and bidirectional. Each SIC can be connected to one or more other SIC's to allow redundant communication paths. Communications in different areas of a SIC network are independent of one another, so that, unlike current bus topology and star topology, there is no fundamental limit on the size or extent of a SIC network. Each SIC can optionally be connected to one or more data terminals, computers, telephones, sensors, actuators, etc., to facilitate interconnectivity among such devices. Networks according to the present invention can be configured for a variety of applications, including a local telephone system, remote computer bus extender, multiplexers, PABX/PBX functionality, security systems, and local broadcasting services. The network can use dedicated wiring, as well as existing wiring as the in-house telephone or electrical wiring.

(21) Appl. No.: **12/124,860**

(22) Filed: **May 21, 2008**

Related U.S. Application Data

(60) Continuation of application No. 11/708,545, filed on Feb. 21, 2007, which is a continuation of application No. 10/793,769, filed on Mar. 8, 2004, now Pat. No. 7,292,600, which is a division of application No. 10/178,223, filed on Jun. 25, 2002, now Pat. No. 7,016,368, which is a continuation of application No. 09/123,486, filed on Jul. 28, 1998, now Pat. No. 6,480,510.

Continuation / Divisional

(19) **United States**

(12) **Patent Application Publication**
Binder et al.

(10) **Pub. No.: US 2009/0288853 A1**

(43) **Pub. Date: Nov. 26, 2009**

(54) **ADAPTER FOR MOUNTING A FACEPLATE OF A FIRST STYLE TO AN ELECTRICAL OUTLET CAVITY OF A SECOND STYLE**

(75) Inventors: **Yehuda Binder**, Hod Hasharon (IL); **Ami Hazani**, Ra'anana (IL)

Correspondence Address:

BROWDY AND NEIMARK, P.L.L.C.
624 NINTH STREET, NW
SUITE 300
WASHINGTON, DC 20001-5303 (US)

(73) Assignee: **MOSAID TECHNOLOGIES INCORPORATED**, Ottawa (CA)

(21) Appl. No.: **12/512,705**

(22) Filed: **Jul. 30, 2009**

Related U.S. Application Data

(63) Continuation of application No. 11/955,024, filed on Dec. 12, 2007, now Pat. No. 7,579,548, which is a continuation of application No. 11/716,683, filed on Mar. 12, 2007, now Pat. No. 7,342,174, which is a continuation of application No. 11/453,831, filed on

Jun. 16, 2006, now Pat. No. 7,196,266, which is a continuation of application No. 11/006,582, filed on Dec. 8, 2004, now Pat. No. 7,109,418, which is a continuation of application No. 10/451,544, filed on Jun. 24, 2003, now Pat. No. 6,927,340, filed as application No. PCT/IL01/00896 on Sep. 25, 2001.

Publication Classification

(51) **Int. Cl.**
H02G 3/14 (2006.01)

(52) **U.S. Cl.** **174/66; 174/67**

(57) **ABSTRACT**

Apparatus for coupling a signal between a wiring and a device. Junction box mounting is popular in North America, whereas cavity mounting is popular in Europe and the Middle East. The apparatus includes an adapter and provides universal mounting for specialized faceplates which are designed and intended for junction box mounting. The adapter features clamps for gripping the inner surface of a wall cavity or sleeve and a plate for mounting an faceplate designed for junction box mounting. The plate has mounting points with a nominal center-to-center distance of 3¼ inches, corresponding to the requirements of junction box mounting.

Continuation / Divisional

(12) **United States Patent Binder**

(10) **Patent No.:** US 7,715,534 B2
 (45) **Date of Patent:** *May 11, 2010

(54) **TELEPHONE OUTLET FOR IMPLEMENTING A LOCAL AREA NETWORK OVER TELEPHONE LINES AND A LOCAL AREA NETWORK USING SUCH OUTLETS**

2,264,396 A 12/1941 Moore

(Continued)

(75) **Inventor:** Yehuda Binder, Hod Hasharon (IL)

FOREIGN PATENT DOCUMENTS

(73) **Assignee:** Mosaid Technologies Incorporated, Ottawa, Ontario (CA)

EP 1 009 156 A2 6/2000

(*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 1029 days.

(Continued)

This patent is subject to a terminal disclaimer.

OTHER PUBLICATIONS

IS-60.04; Node Communications Protocol Part 6: Application Layer Specification; Revision Apr. 18, 1996 (129 pages).

(21) **Appl. No.:** 11/434,927

(Continued)

(22) **Filed:** May 17, 2006

Primary Examiner—Stella L Woo

(65) **Prior Publication Data**

(74) *Attorney, Agent, or Firm*—Browdy & Neimark, PLLC

US 2006/0203981 A1 Sep. 14, 2006

(57) **ABSTRACT**

Related U.S. Application Data

(63) Continuation of application No. 10/827,349, filed on Apr. 20, 2004, now Pat. No. 7,123,701, which is a continuation of application No. 10/412,251, filed on Apr. 14, 2003, now Pat. No. 6,757,368, which is a continuation of application No. 09/531,692, filed on Mar. 20, 2000, now Pat. No. 6,549,616.

A network for transporting power and multiplexed data and digital telephone signals. The network includes at least three nodes and first and second wiring segments in a building for carrying the multiplexed data and digital telephone signals, and at least one of the segments is configured to additionally carry a power signal. A power consuming component is connected to the at least one wiring segment and is powered by the power signal carried by that segment. Each wiring segment connects a different pair of the nodes together to form, with nodes nodes, a packet based bi-directional communication link. One of the nodes contains communication link composed of a repeater, a bridge, or a router connectable to a data unit. At least one of the nodes is connected to a remote data unit external to the building for coupling the remote data unit to at least one of said communication links.

(51) **Int. Cl.**
H04M 11/00 (2006.01)

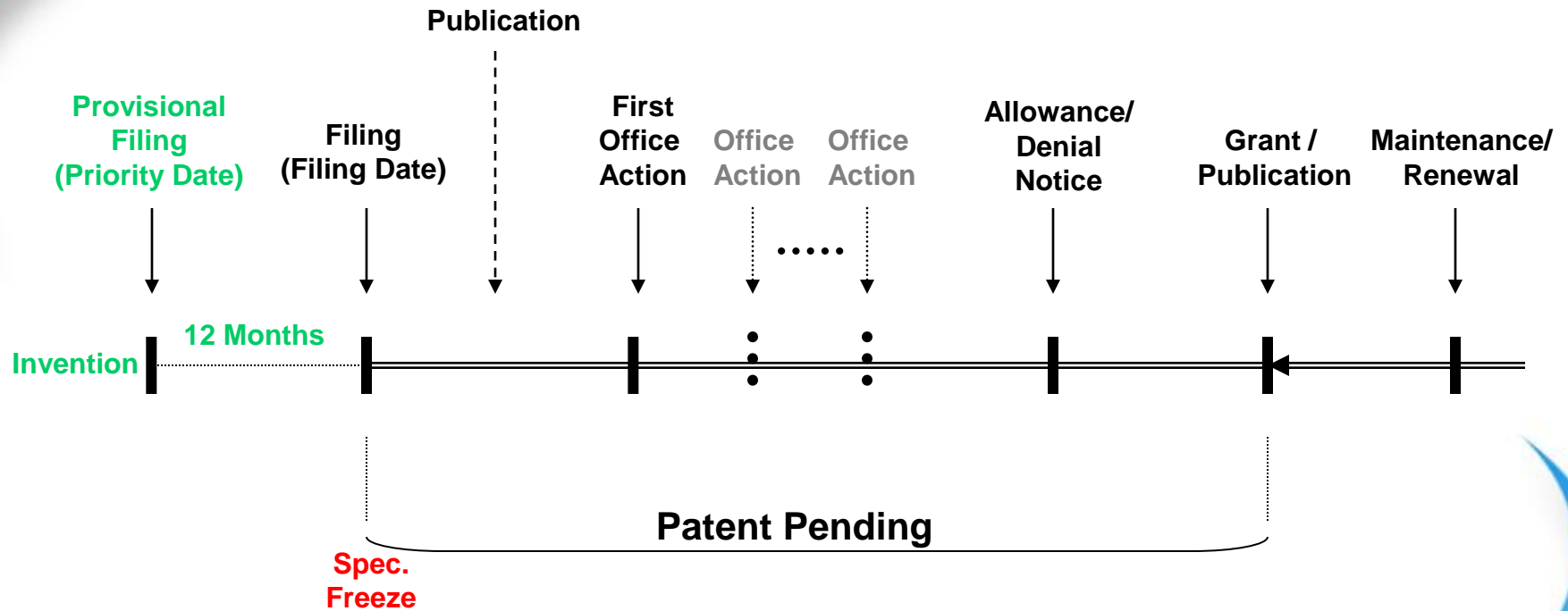
(52) **U.S. Cl.** 379/90.01; 379/93.08

(58) **Field of Classification Search** 379/90.01, 379/93.08, 93.28, 93.31
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

US Provisional Filing



- **Not Recommended !!!!**

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US 20020021465A1

(19) **United States**

(12) **Patent Application Publication**
Moore, JR. et al.

(10) **Pub. No.: US 2002/0021465 A1**
 (43) **Pub. Date: Feb. 21, 2002**

(54) **HOME NETWORKING GATEWAY**

Publication Classification

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(51) **Int. Cl.⁷ H04J 14/02; H04B 10/00**
 (52) **U.S. Cl. 359/125; 359/167**

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(57) **ABSTRACT**

A home networking gateway provides an interface between an HFC network and an in-home network. Full voice and data connection between the HFC network and each device in the in-home network is provided through the interface. A translator included in the home networking gateway is utilized to provide a mapping between the communication protocols used in the in-home network and the protocols used in the HFC network, eliminating the need for the in-home network to be dependent upon the HFC-specific protocols.

(21) Appl. No.: **09/752,570**

(22) Filed: **Dec. 29, 2000**

Related U.S. Application Data

(63) Non-provisional of provisional application No. 60/173,700, filed on Dec. 30, 1999.

(19) **United States**
(12) **Patent Application Publication**
IGOV

(10) **Pub. No.: US 2010/0298774 A1**
(43) **Pub. Date: Nov. 25, 2010**

(54) **METHODS AND DEVICES FOR
LAPAROSCOPIC SURGERY**

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(21) Appl. No.: **12/781,831**

(22) Filed: **May 18, 2010**

Related U.S. Application Data

(60) Provisional application No. 61/179,413, filed on May 19, 2009.

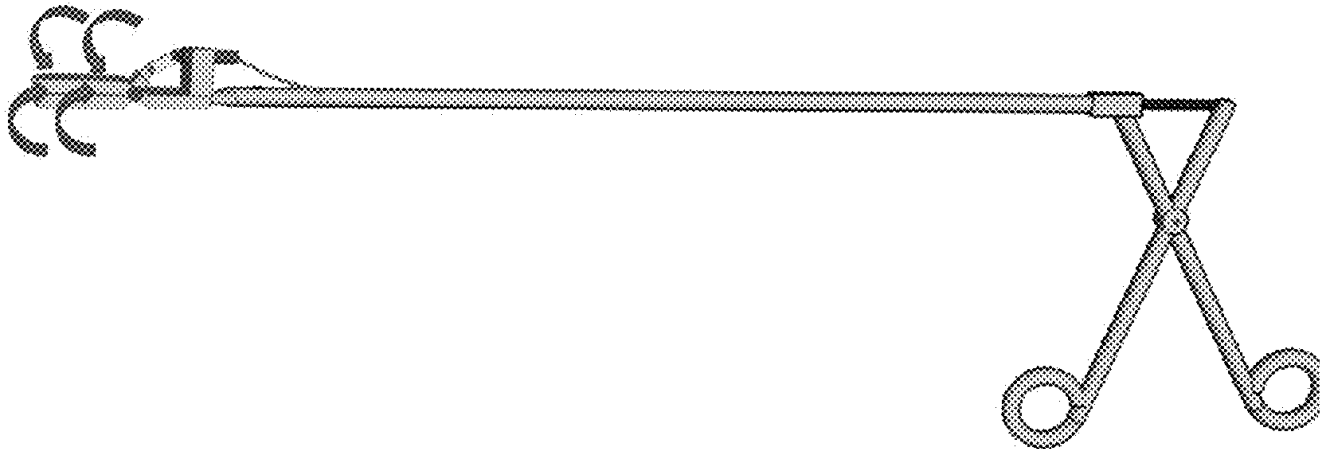
Publication Classification

(51) **Int. Cl.**
A61B 17/34 (2006.01)
A61B 17/29 (2006.01)

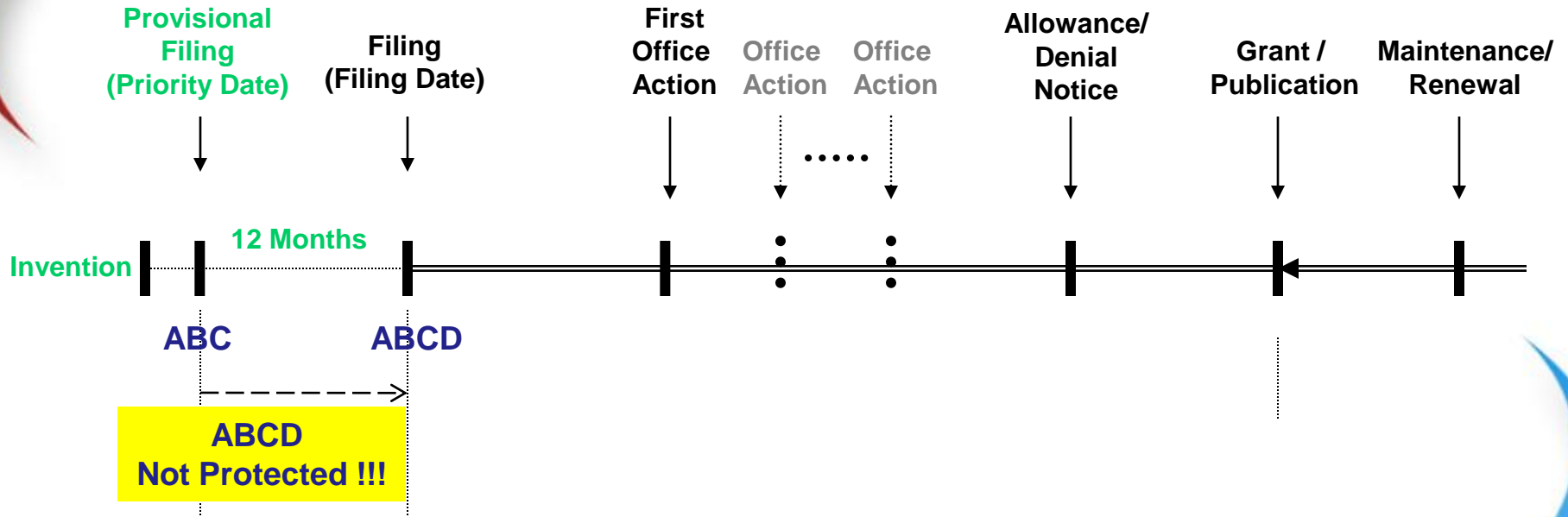
(52) **U.S. Cl.** **604/164.01; 606/207**

(57) **ABSTRACT**

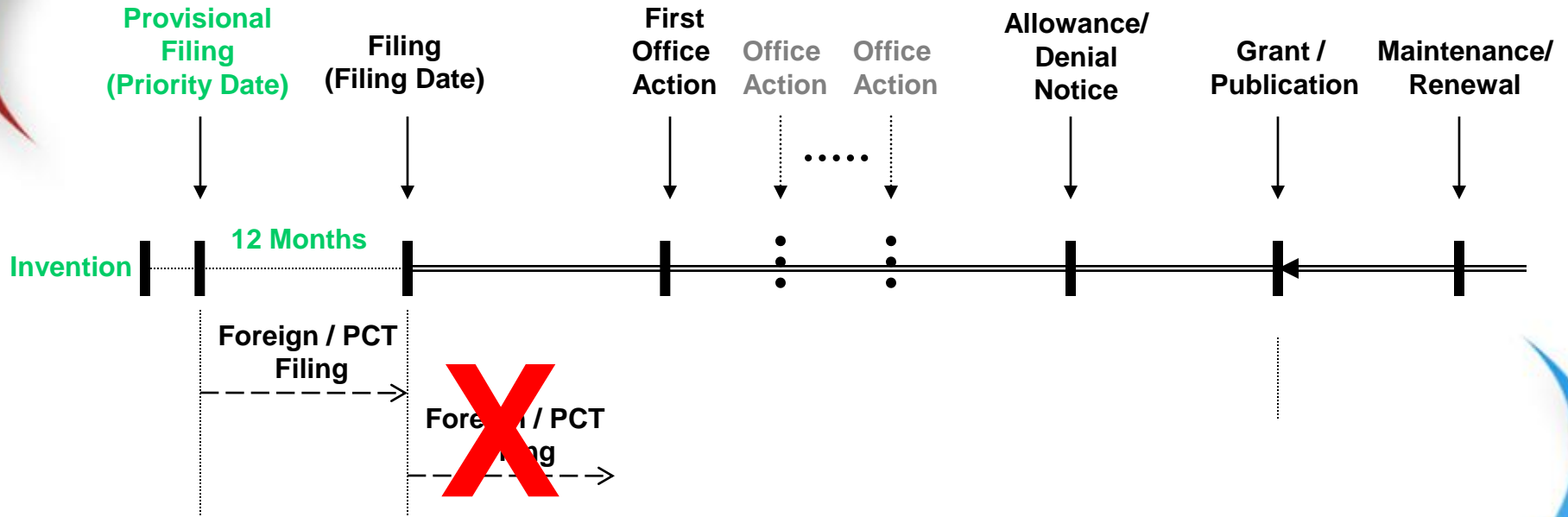
Two part laparoscopic tools and surgical methods using such tools are presented. The tools and methods enable use of multiple surgical tools each having wide tool heads to be used in a body cavity using a single wide trocar and one or more narrow incisions, thereby reducing surgical risk and enhancing patient comfort and shortening recovery time. Additional instruments for facilitating laparoscopic surgery are also presented.



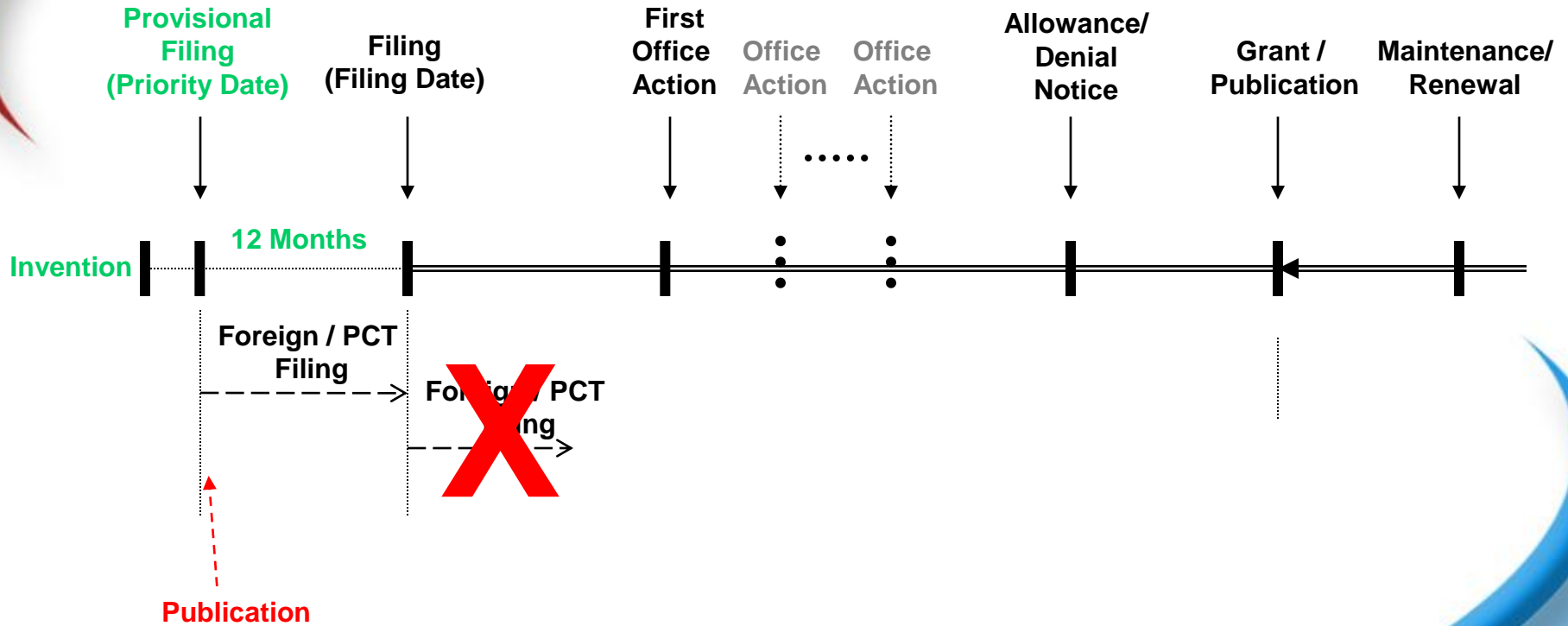
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Thank You