

# **Patents and Intellectual Property for Entrepreneurs and Small Businesses**

MBDA Webinar Series

August 11, 2015

UNITED STATES  
PATENT AND TRADEMARK OFFICE



# Overview of IP: The USPTO in 2014



USPTO Headquarters in Alexandria, VA

8,611 Patent Examiners

618,330 Patent Applications Filed

329,613 Patents Issued

429 Trademark Examining Attorneys

336,275 Trademark Applications

206,555 Certificates of Registration

# Overview of IP: Source of Authority

## Patents and Copyrights

- “The Congress shall have the power... To **promote the progress** of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries” (U.S. Const., Art. I, Sec. 8, emphasis added)
- First patent statute and first copyright statute enacted in 1790 during the first Congress

## Trademarks

- “The Congress shall have the power... To **regulate commerce** with foreign nations, and among the several states”
- First federal statutes were enacted in 1870 and 1881

### Trademarks:

- Made by “Apple” (logo)
- Product “iPhone”
- Software “iOS”, “Safari”

### Patents:

- Semiconductor circuits
- Touch Screen
- Battery/Power Control
- Antenna
- Speaker
- Device Housing

### Copyrights:

- Software code
- Instruction manual
- Ringtone

### Trade secrets:

- ???

### Designs (some of them patented):

- Form of overall phone
- Placement of button & speaker
- Color pattern of trim
- Surface finish



© Apple

# Overview of IP: Trademarks

## Common Law

- protection derived from use (™)

## State Registration

- registered with one or more U.S. states

## Federal Registration

- registered in the U.S. Patent and Trademark Office

**Protects against confusion as to the source of goods or services, not from competition that does not confuse customers**



# Overview of IP: Registered Trademarks

- Right to enforce nationally and bring legal action in federal courts
- Use of federal Trademark registration symbol ®
- Right to record mark with Customs
- Serve as basis for foreign filing
- Publication in U.S. Trademark database



# Overview of IP: Copyright

- Protects “original works of authorship” including literary, dramatic, musical, artistic and certain other intellectual works fixed in a tangible medium
- Library of Congress administers registration; USPTO advises the Executive branch on intellectual property issues including copyright
- © symbol represents an identification of the owner, not an indication that the copyright has been registered

# Overview of IP: Copyright Registration

- Copyright protection is secured automatically upon creation (fixation). A work is “created” when it is fixed in a copy for the first time.
- No publication or registration is required. (There are, however, advantages to registration.)

# Overview of IP: Trade Secrets

- Any information that derives economic value from not being generally known or ascertainable
- Can be formulas, patterns, compilations, programs, devices, methods, techniques or processes
- Protection stems from common law dating to the 1800's
- All states have some sort of trade secret protection
- Most laws based on the Uniform Trade Secrets Act
- In 2014 Congress considered, but did not pass, federal versions of the UTSA

# Overview of IP: Why Trade Secret?

## Trade Secret Basics:

- Protects commercially valuable proprietary information, e.g., formulas or business information that gives a competitive advantage
  - Customer lists
  - Product formulations
  - Search algorithms
- Trade Secrets are not generally known and must be subject to reasonable efforts to preserve confidentiality

## Common Ways to Lose a Trade Secret:

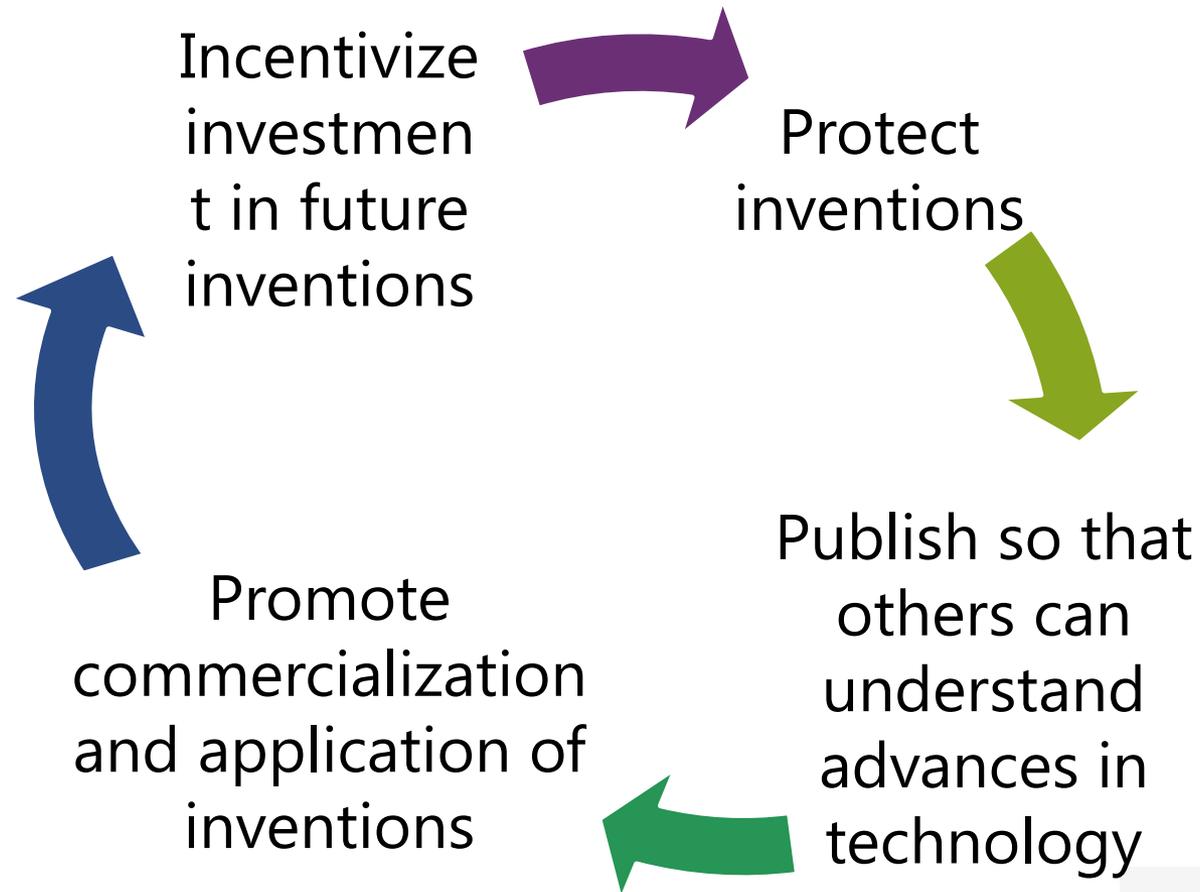
- Failure to take adequate steps to prevent disclosure
- Owner or owner-authorized disclosure
- Reverse engineering
- Independent development



# Overview of IP: Patents

- Right to **exclude others** from making, using, selling, offering for sale or importing the claimed invention
- Right conditional on inventor applying for, and USPTO issuing, a patent
- Strict time limits to apply for a patent
- Limited term
- Territorial: protection only in territory that granted patent; **NO world-wide patent**

# Overview of IP: Patents



# Overview of IP: Why Get a Patent?

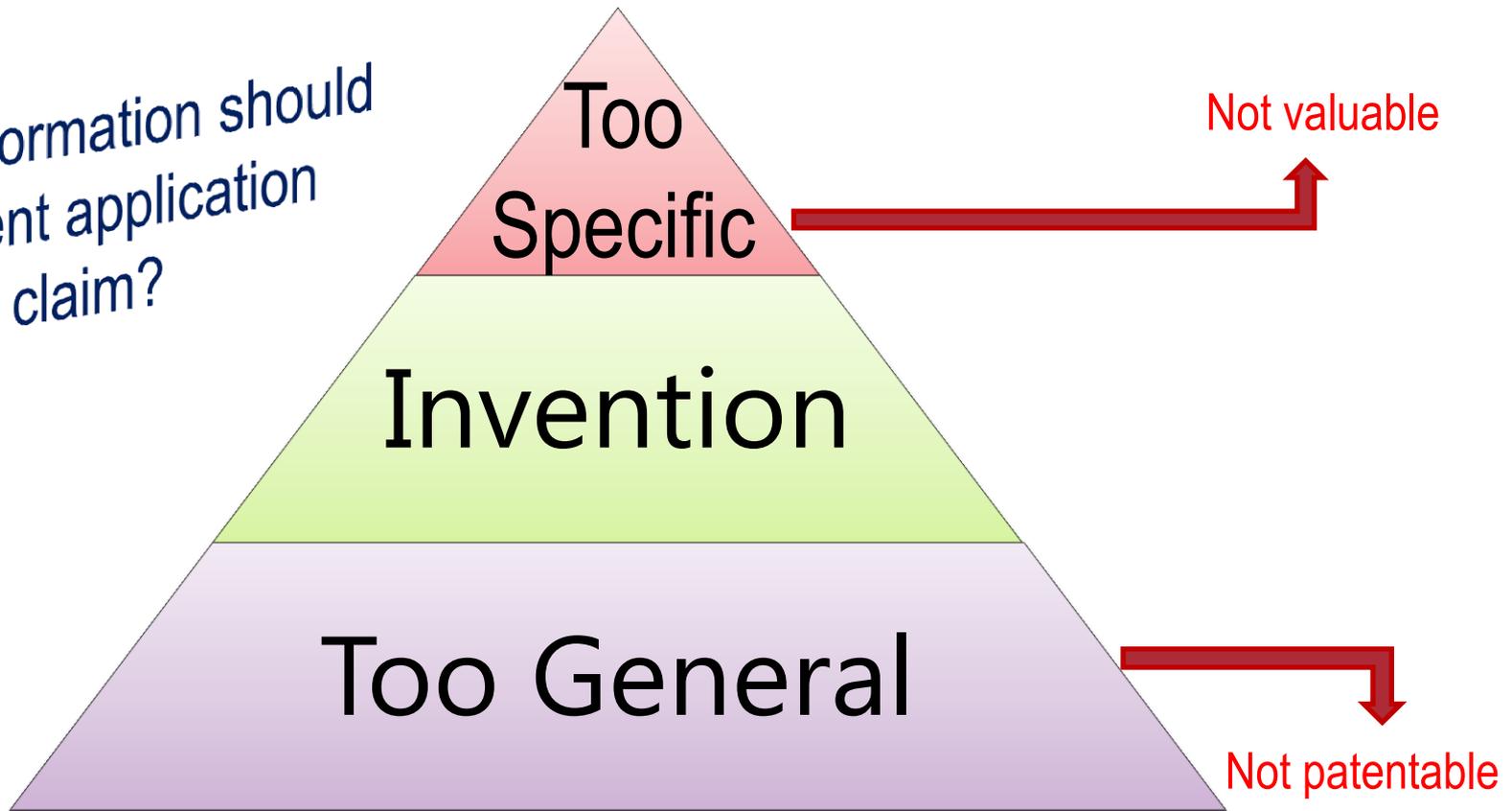
- A patent can be
  - Used to gain entry to a market
  - Used to exclude others from a market
  - Used as a marketing tool to promote unique aspects of a product
  - Sold or licensed, like other property

# Examination: What Does an Examiner Do?

- **Reads and understands** the invention set forth in the specification
- Determines whether the application is adequate to define the **metes and bounds** of the claimed invention
- Determines the **scope of the claims**
- **Searches** existing technology for claimed invention
- Determines **patentability** of the claimed invention

# Patent Scope

What information should  
a patent application  
claim?



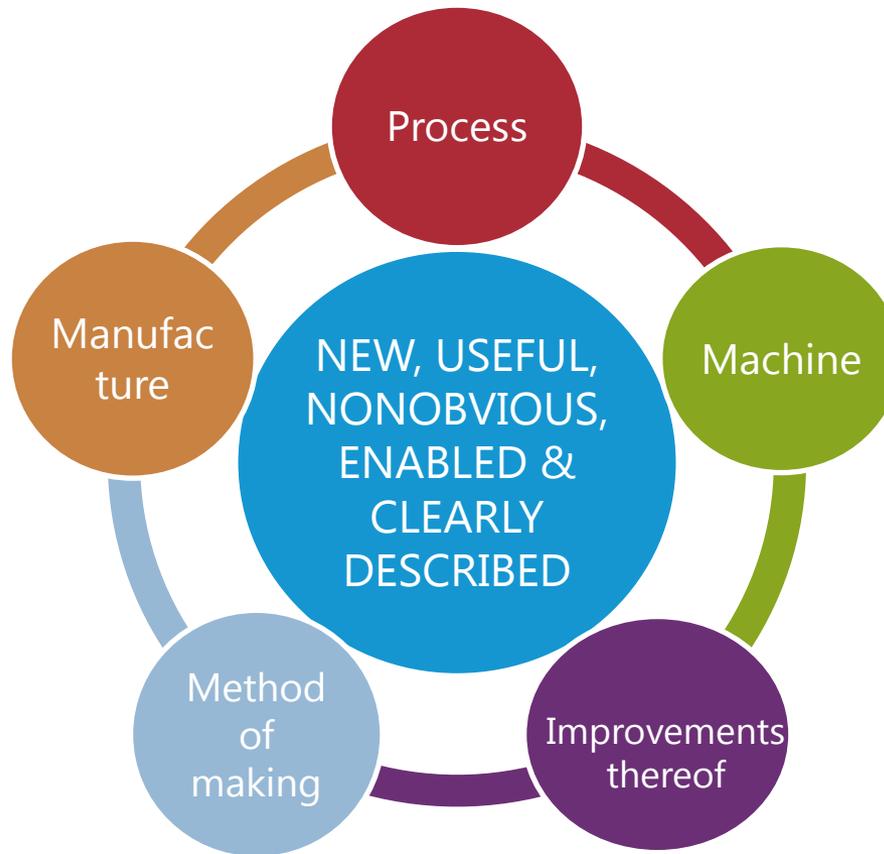
# Examination: What May an Examiner Do?

- Advise on advantages of, and appropriate classification fields for, pre-examination search
- Advise on advantages of securing services of a competent patent attorney or agent
- Advise on Office fees and Office procedures in general
- Assist public in conducting a search, short of rendering patentability advice or opinion as to whether an application should be filed

# Examination: Role of Patent Examiner

- Issue Valid Patents
  - Make appropriate objections
  - Make only reasonable rejections
  - Help applicant identify allowable subject matter
- Act as an advocate for the Public
  - Ensure development of clear and complete file record
  - Patent prosecution before Office should not be adversarial, instead it should be cooperative investigation between Examiner and Applicant, which ensures Applicant receives a patent only for that which they are entitled to in accordance with Patent laws

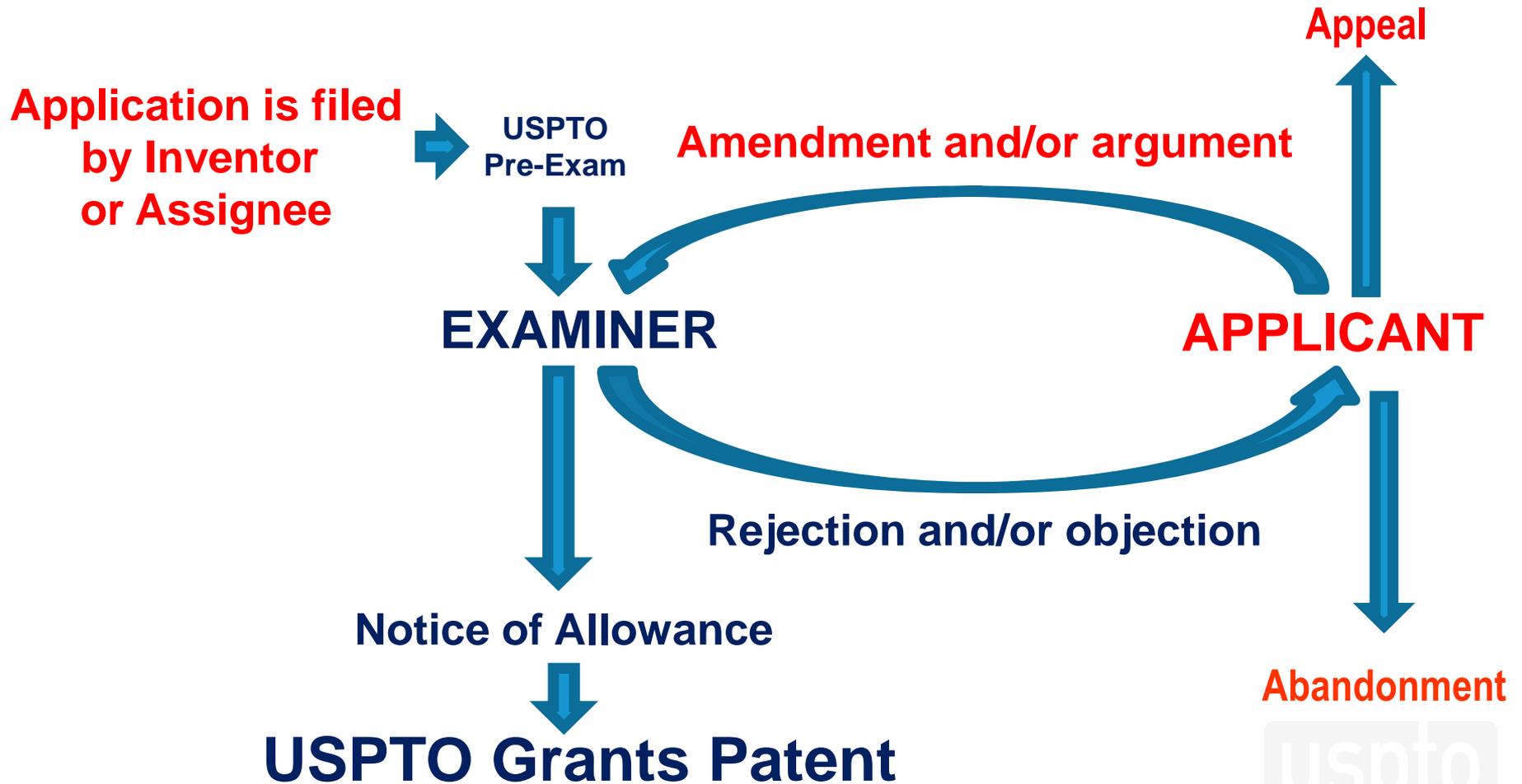
# What is patentable?



# Examination: Burden of Proof

- Patent Examiner reviews contents of the application for compliance with all U.S. legal requirements
- **Initial burden is on the examiner:  
An applicant is entitled to a patent unless...**
  - Requirements of U.S. Law are not met

# Patent Examination Process Overview



# How to Read a Patent: Cover Page

Scope of protection is not defined by the title or the picture on the front!



(12) **United States Patent**  
**Van Halen** (10) **Patent No.:** **US 7,183,475 B2**  
 (45) **Date of Patent:** **Feb. 27, 2007**

(54) **STRINGED INSTRUMENT WITH ADJUSTABLE STRING TENSION CONTROL**  
 (75) **Inventor:** **Edward Van Halen, Los Angeles, CA (US)**  
 (73) **Assignee:** **E.L.V.H., Inc., Burbank, CA (US)**  
 (\*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) **Appl. No.:** **10/370,351**  
 (22) **Filed:** **Feb. 18, 2003**  
 (65) **Prior Publication Data**  
 US 2004/0152003 A1 Aug. 19, 2004

(51) **Int. Cl.**  
**G10D 3/04** (2006.01) **84/298**  
 (52) **U.S. Cl.** **84513, 298, 299, 307, 312 R**  
 (58) **Field of Classification Search** **84/297 R**  
 See application file for complete search history.

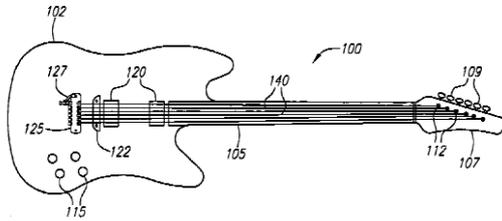
(56) **References Cited**  
**U.S. PATENT DOCUMENTS**  
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 4,335,670 A 8/1985 Borioff ..... 84/312  
 4,610,190 A \* 9/1986 Maloney ..... 84/312 R  
 4,686,883 A 8/1987 Fiebs et al. .... 84/313  
 5,127,298 A \* 7/1992 Sage et al. .... 84/313  
 5,542,330 A 8/1996 Borioff ..... 84/298  
 5,760,321 A \* 6/1998 Saibert ..... 84/312 R  
 5,907,114 A \* 5/1999 Culver ..... 84/313

**OTHER PUBLICATIONS**  
 "The tone and volume controls." The electric guitar: analysis of patents, undated, 3 pages.  
 "Schaller Floyd Rose Tremolo Diagram," Guitar Body Schaller *File*, tremolo, undated, 2 pages.  
 "Schaller 456 Fine Tuning Stud Mount Bridge Diagram." Guitar Body 456 *Bridge*, undated, 1 page.  
 Van Halen, Ed., "Finally . . . an easy way to drop from E down to D and back, without unclamping," undated 2 pages.  
 "Tuner Instruction Manual," undated, 2 pages.  
 Brochure from Hipshot Products, Inc., Jan. 2002.

\* cited by examiner  
 Primary Examiner—Kimberly Lockert  
 (74) **Attorney, Agent, or Firm**—Inell & Maloney LLP

(57) **ABSTRACT**  
 A tension adjustment mechanism for a stringed musical instrument suitable for use on a tailpiece assembly comprises a pivoting member (such as a string receptor), an adjustable stop, and a lever handle engaged with the pivoting member. The pivoting member preferably has a post for securely receiving an end of a string and an elongate arm. Placement of the handle in a first position preferably causes the adjustable stop to engage and depress the elongate arm of the pivoting member, thereby increasing tension on the string. Placement of the handle in a second position preferably causes the adjustable stop to disengage the elongate arm of the pivoting member, thereby allowing the pivoting member to return to its original position, and decreasing tension on the string. A fine tuning adjustment may be included in the tailpiece assembly. The adjustable stop and/or the tuning adjustment may comprise adjustable screws.

28 Claims, 5 Drawing Sheets



(12) **United States Patent**  
**Van Halen**

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(75) **Inventor:** **Edward Van Halen, Los Angeles, CA (US)**

(73) **Assignee:** **E.L.V.H., Inc., Burbank, CA (US)**



# How to Read a Patent: Cover Page

The USPTO is moving to harmonize with the European Patent Office on a classification scheme. G10D is Stringed Instruments.

  
 US007183475B2

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(21) **Appl. No.:** 10070351  
 (22) **Filed:** Feb. 18, 2003

(65) **Prior Publication Data**  
 US 2004/015203 A1 Aug. 19, 2004

(51) **Int. Cl.**  
*G10D 3/04* (2006.01)

(52) **U.S. Cl.** ..... 84/298

(58) **Field of Classification Search** ..... 84/297 R, 84/313, 298, 299, 307, 312 R  
 See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

3,142,221 A \* 7/1964 Boyd ..... 84/313  
 4,335,670 A 8/1985 Borisoff ..... 84/312  
 4,610,190 A \* 9/1986 Maloney ..... 84/312 R  
 4,686,883 A 8/1987 Piche et al. .... 84/313  
 5,127,298 A \* 7/1992 Snape et al. .... 84/313  
 5,542,330 A 8/1996 Borisoff ..... 84/298  
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 5,907,114 A \* 5/1999 Culver ..... 84/313

28 Claims, 5 Drawing Sheets

(51) **Int. Cl.**  
*G10D 3/04* (2006.01)

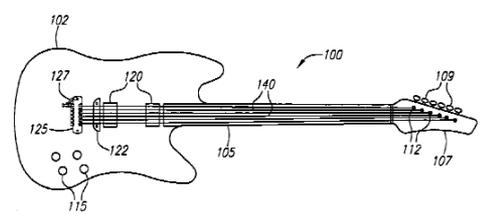
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5,542,330	A	8/1996	Borisoff	.....	84/298
5,760,321	A *	6/1998	Seabert	.....	84/312 R
5,907,114	A *	5/1999	Culver	.....	84/313





# How to Read a Patent: Claims

Scope of protection is defined by the claims!



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**Van Halen**

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(51) **Int. Cl.**

G10D 3/04 (2005.01)

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3,142,221 A	7/1964	Boyd	84/313
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4,610,150 A	9/1986	Maloney	84/312 R
4,686,883 A	8/1987	Piche et al.	84/313
5,127,298 A	7/1992	Saage et al.	84/313
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5,760,321 A	6/1998	Saebert	84/312 R
5,807,114 A	5/1999	Culver	84/313

**OTHER PUBLICATIONS**

"The tone and volume controls." The electric guitar analysis of components, undated, 3 pages.  
 "Schaller Floyd Rose Tremolo Diagram." Guitar Body Schaller Floyd Tremolo, undated, 2 pages.  
 "Schaller 456 Fine Tuning Stud Mount Bridge Diagram." Guitar Body 456 Schaller Bridge, undated, 1 page.  
 Van Halen, Eddie. "Frankly... an easy way to drop from E down to D and back, without unclamping," undated, 2 pages.  
 "Dimez Instruction Manual," undated, 2 pages.  
 Brochure from Hipshot Products, Inc., Jan. 2002.

\* cited by examiner

*Primary Examiner*—Kimberly Lockett  
*(74) Attorney, Agent, or Firm*—Irell & Manella LLP

(57)

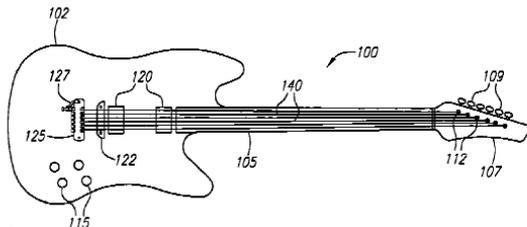
**ABSTRACT**

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28 Claims, 5 Drawing Sheets

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8. An apparatus for adjusting the tension of at least one string of a stringed musical instrument, comprising: a pivoting member configured to engage an end of a string and comprising an elongate arm; an adjustable stop; and a handle adapted for manual actuation; wherein placement of the handle in a first position causes a contact member to engage and depress the elongate arm of the pivoting member, thereby increasing tension on the string, and wherein placement of the handle in a second position causes the contact member to disengage the elongate arm of the pivoting member, thereby allowing the pivoting member to come to rest against the adjustable stop and decreasing tension on the string; wherein said tailpiece comprises a plurality of string receptors substantially serially aligned between a first end and a second end of said tailpiece; wherein said handle is secured proximate to the first end of said tailpiece; wherein said contact member is secured proximate to the second end of said tailpiece; and wherein said handle is mechanically engaged with said contact member via a rod extending substantially from the first end of said tailpiece to the second end of said tailpiece.



# How to Read a Patent: File History

uspto.GOV Patent Application Information Retrieval  
The United States Patent and Trademark Office  
an agency of the Department of Commerce

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10/370,351 STRINGED INSTRUMENT WITH ADJUSTABLE STRING TENSION CONTROL 157435-0004

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This application is officially maintained in electronic form. To View: Click the desired Document Description. To Download and Print: Check the desired document(s) and click Start Download.

**Available Documents**

Mail Room Date	Document Code	Document Description	Document Category	Page Count	PDF
02-07-2007	ISSUE.NTF	<a href="#">Issue Notification</a>	PROSECUTION	1	<input type="checkbox"/>
11-27-2006	IFEE	<a href="#">Issue Fee Payment (PTO-85B)</a>	PROSECUTION	1	<input type="checkbox"/>
11-27-2006	LET.	<a href="#">Miscellaneous Incoming Letter</a>	PROSECUTION	3	<input type="checkbox"/>
11-27-2006	DRW	<a href="#">Drawings-only black and white line drawings</a>	PROSECUTION	5	<input type="checkbox"/>
11-27-2006	IFEE	<a href="#">Issue Fee Payment (PTO-85B)</a>	PROSECUTION	1	<input type="checkbox"/>
10-03-2006	NOA	<a href="#">Notice of Allowance and Fees Due (PTOL-85)</a>	PROSECUTION	3	<input type="checkbox"/>
10-03-2006	NOA	<a href="#">Notice of Allowance and Fees Due (PTOL-85)</a>	PROSECUTION	1	<input type="checkbox"/>
10-03-2006	1449	<a href="#">List of References cited by applicant and considered by examiner</a>	PROSECUTION	1	<input type="checkbox"/>
10-03-2006	IFW	<a href="#">Issue Information including classification, examiner, name, claim, renumbering, etc.</a>	PROSECUTION	1	<input type="checkbox"/>
10-03-2006	SRFW	<a href="#">Search information including classification, databases and other search related notes</a>	PROSECUTION	1	<input type="checkbox"/>
10-02-2006	WFEE	<a href="#">Fee Worksheet (SB06)</a>	PROSECUTION	1	<input type="checkbox"/>
09-27-2006	SRNT	<a href="#">Examiner's search strategy and results</a>	PROSECUTION	1	<input type="checkbox"/>
09-22-2006	A..	<a href="#">Amendment/Req. Reconsideration-After Non-Final Reject</a>	PROSECUTION	2	<input type="checkbox"/>
09-22-2006	CLM	<a href="#">Claims</a>	PROSECUTION	12	<input type="checkbox"/>
09-22-2006	REM	<a href="#">Applicant Arguments/Remarks Made in an Amendment</a>	PROSECUTION	5	<input type="checkbox"/>
09-22-2006	LET.	<a href="#">Miscellaneous Incoming Letter</a>	PROSECUTION	2	<input type="checkbox"/>
06-20-2006	CTNF	<a href="#">Non-Final Rejection</a>	PROSECUTION	5	<input type="checkbox"/>
06-20-2006	892	<a href="#">List of references cited by examiner</a>	PROSECUTION	1	<input type="checkbox"/>

The prosecution history of (recent) issued patents and published applications is available on the PAIR system.

# Do I really need a patent?

## - Myths -

- “If I just publish, I will prevent anyone from getting a patent on my invention”
  - What if already patented?
  - No Patent Claim = No Protection
  - Can’t exclude others from market
  - You may be excluded from using
- “I’m not going to get a patent, because other countries will steal my invention”
  - How will you keep it secret?

# Provisional Patent Applications

- A low-cost way to establish an early effective filing date (priority date) in non-provisional patent application with fewer formalities
- 12 month window to file corresponding utility patent application in order to benefit from the priority date of the provisional application
  - Caution – earliest effective filing date for any new matter filed in utility application is the filing date of the non-provisional application
- Provisional application is abandoned automatically at 12 months and is not examined
- Patent term measured from filing date of subsequent **non-provisional** application

# Patent Infringement in the U.S.

Occurs when –

Without authorization of patent owner:

- Making or using the invention
- Offer to sell or sells within the U.S.
- Import the invention into the U.S.
- Actively encourage infringement by another
  - Inducement
  - Contributory Infringement

# Enforcement Considerations

- Burden is on the Patent Owner
- Enforceability of patents
  - Effectiveness of enforcement laws and procedures in the country/region of interest
    - Some countries allow recordation of patent with customs
- Competitor products should be monitored
  - In stores
  - At trade shows
- Licensing may be beneficial
  - Limit as to time, geographical area, or field of use

# Contact USPTO

- Reach us via
  - [www.uspto.gov](http://www.uspto.gov)
  - [independentinventor@uspto.gov](mailto:independentinventor@uspto.gov)
  - 1(800)786-9199

**Thank You**  
**anthony.knight@uspto.gov**

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