The Business of Intellectual Property

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Overview

- Intellectual Property Primer
  - Trade Secrets
  - Copyrights
  - Trademarks
  - Patents
- Utility Patents
  - Painting a Rembrandt
  - Practical Tips
  - Examples regarding adding value to the patent process

Trade Secret

A “trade secret” is information that derives value from not being generally known and not being readily ascertainable by others, and is the subject of efforts reasonable under the circumstances to maintain its secrecy.

Term:

- Potentially forever – so long as the above criteria are met.
- Term is for as long as the “trade secret” can be kept.

Copyright

- Copyrights protects “original works of authorship fixed in any tangible medium of expression.” Only the owner can reproduce the work and prepare derivative copies of the work; others may not copy the work.
- Expression of the idea is what is protected.
- Term of protection: typically life of author + 70 years.

Trademarks

- Any word, name, symbol or device used to identify and distinguish one's goods from another's and to indicate the source of the goods.
- Purpose: prevent consumer confusion and protect goodwill of mark owner.
- Identifies source and identifies consistent level of quality.
- Term: as long as used, valid, and enforceable.

Design Patents

- A design consists of the visual ornamental characteristics embodied in, or applied to, an article of manufacture.
- Purpose: Prevent others from copying how an article of manufacture looks (auto body parts)
- Directed to how the article of manufacture looks.
- Term of protection: 14 years from the date of grant.

Utility Patents

- A governmental grant of exclusive, monopoly rights, for a limited time (20 years from the date of filing), to exclude others from making, using, and selling a new, useful and non-obvious invention
- Set forth in the U.S. Constitution
- Purpose: to foster technology
  - Inventor teaches the technology via patent
  - For teaching, the inventor gets a 20 year monopoly
- Claimed in words.

Utility Patent Primer

- Parts of a Patent
  - Drawings
  - Specification
  - CLAIMS
- More about CLAIMS
  - Laundry list of elements
  - Define the boundaries of an invention
  - Have to apply to others in order to make money

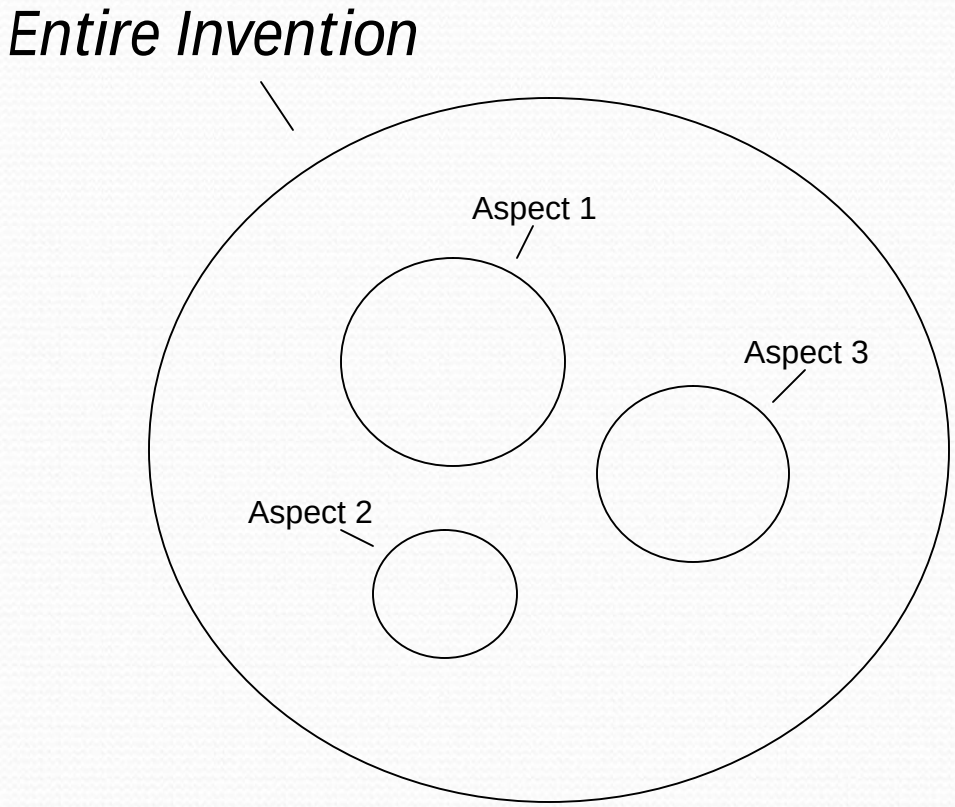
Utility Patent Primer

- Patents can be used to prevent others from
  - Making the Invention (of the claims)
  - Using the Invention (of the claims)
  - Selling the Invention (of the claims)
- Patents are BUSINESS TOOLS
  - Keep others out of select markets
  - Monetize/License Patents
  - Level the playing field

History of Patent Claiming

- Most patent attorneys were trained to claim broadly
- Claimed cool aspects of an invention
  - Remember—Patent Attorneys are engineers/scientists
- Using patents
  - Sue if it happens to apply
  - License if it happens to apply

History of Patent Claiming



IBM Patent History

- IBM had 10,000 patents
- Lucky if they hit a target 1-2% of the time
- Set out to increase that percentage

IBM Patent History

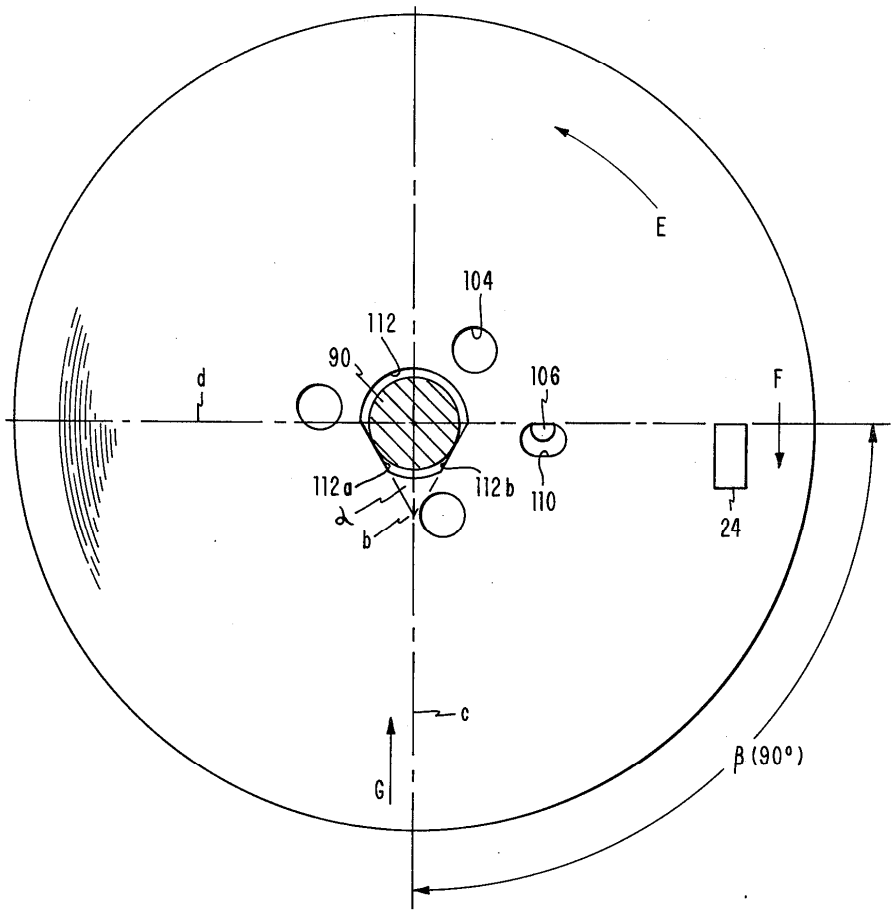


FIG. 14

IBM Patent History

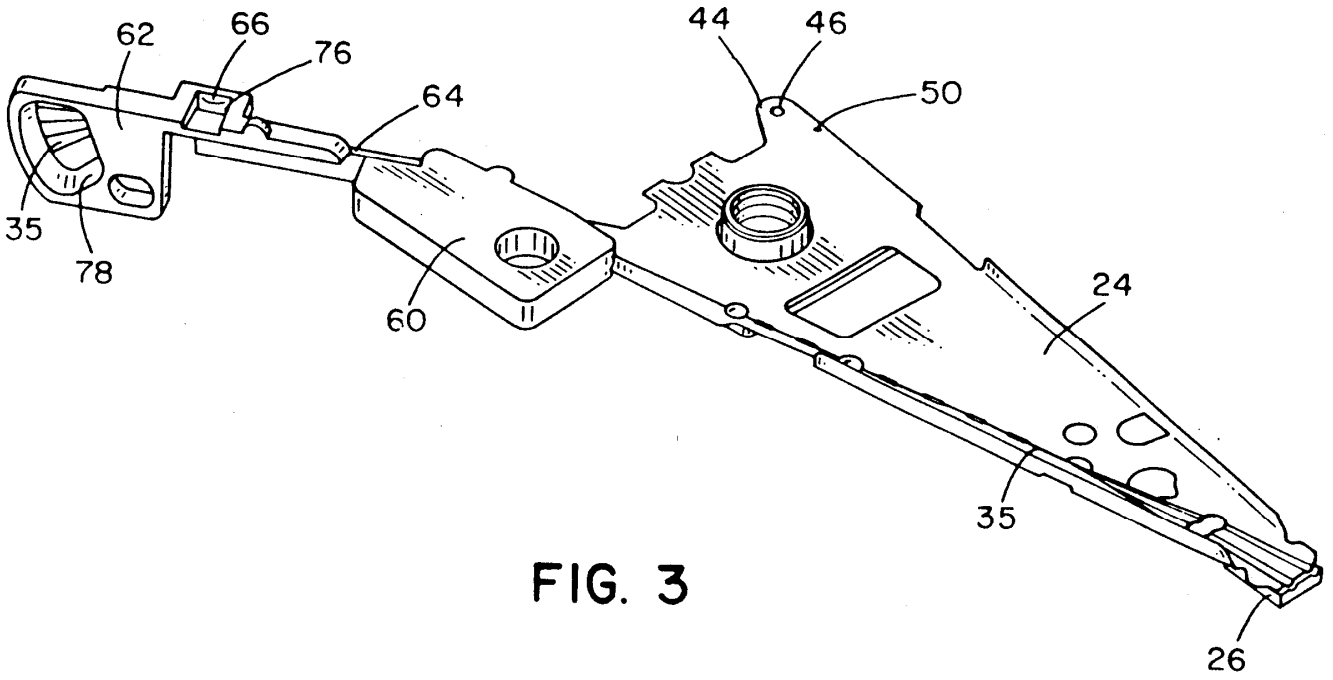


FIG. 3

IBM Patent History

US005146450A

United States Patent [19]

Brooks et al.

[11] **Patent Number: 5,146,450**

[45] **Date of Patent: Sep. 8, 1992**

[54] **METHOD AND APPARATUS FOR BEARING TO COMB ATTACHMENT**

[75] Inventors: **Peter E. Brooks; John R. Reidenbach; Mark E. Troutman**, all of Rochester, Minn.

[73] Assignee: **International Business Machines Corporation**, Armonk, N.Y.

[21] Appl. No.: **532,307**

[22] Filed: **Jun. 1, 1990**

[51] **Int. Cl.**[5] **G11B 17/00**; G11B 21/16; G11B 17/02; G11B 5/54

[52] **U.S. Cl.** **369/244**; 369/255; 360/99.08; 360/99.09; 360/105; 360/107

[58] **Field of Search** 369/244, 255; 360/105, 360/106, 107, 97.01, 99.08, 99.09, 99.11

[56] **References Cited**

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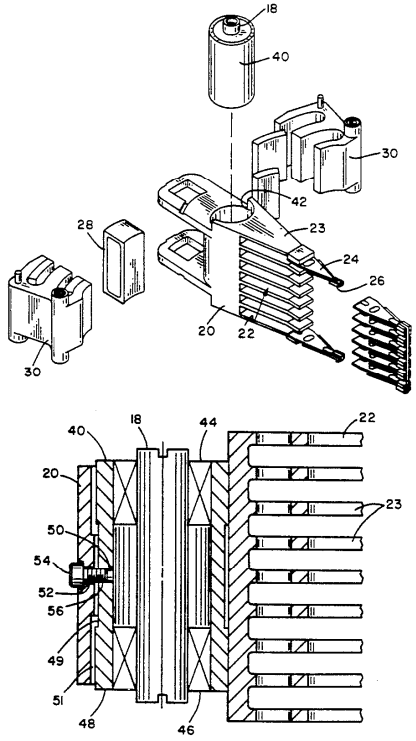
Primary Examiner—John W. Shepperd
Assistant Examiner—Tan Nguyen
Attorney, Agent, or Firm—Richard E. Billion

[57] **ABSTRACT**

Disclosed is a method and apparatus for attaching a bearing cartridge to an actuator arm assembly in a disk drive. The bearing cartridge includes the actuator shaft, an outer sleeve and a set of bearings. The actuator arm assembly has a bore therein which receives the bearing cartridge. The bearing cartridge is anchored to the actuator arm assembly at a single location.

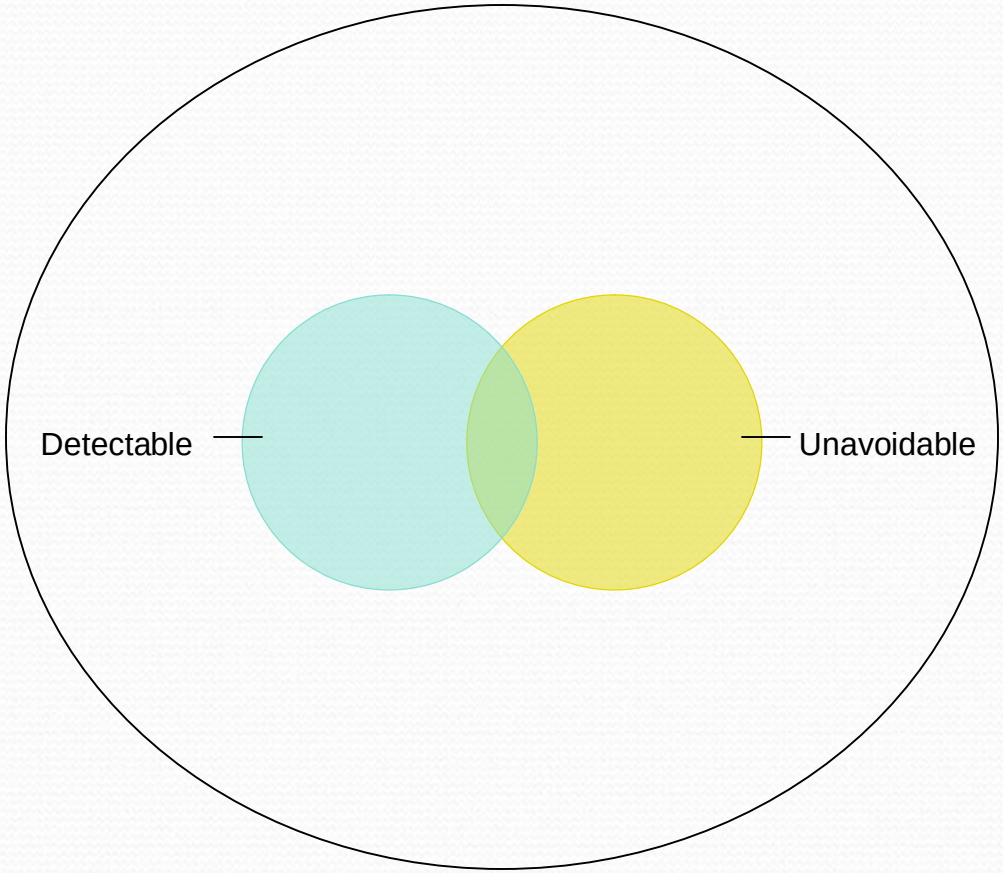
16 Claims, 5 Drawing Sheets



Licensing Bull's-eye Part I

- Test for a licensable claim
  - Is it DETECTABLE?
  - Is it UNAVOIDABLE?
- Realize that portions of the invention that meet this test may not align with the inventor's idea of the cool aspects

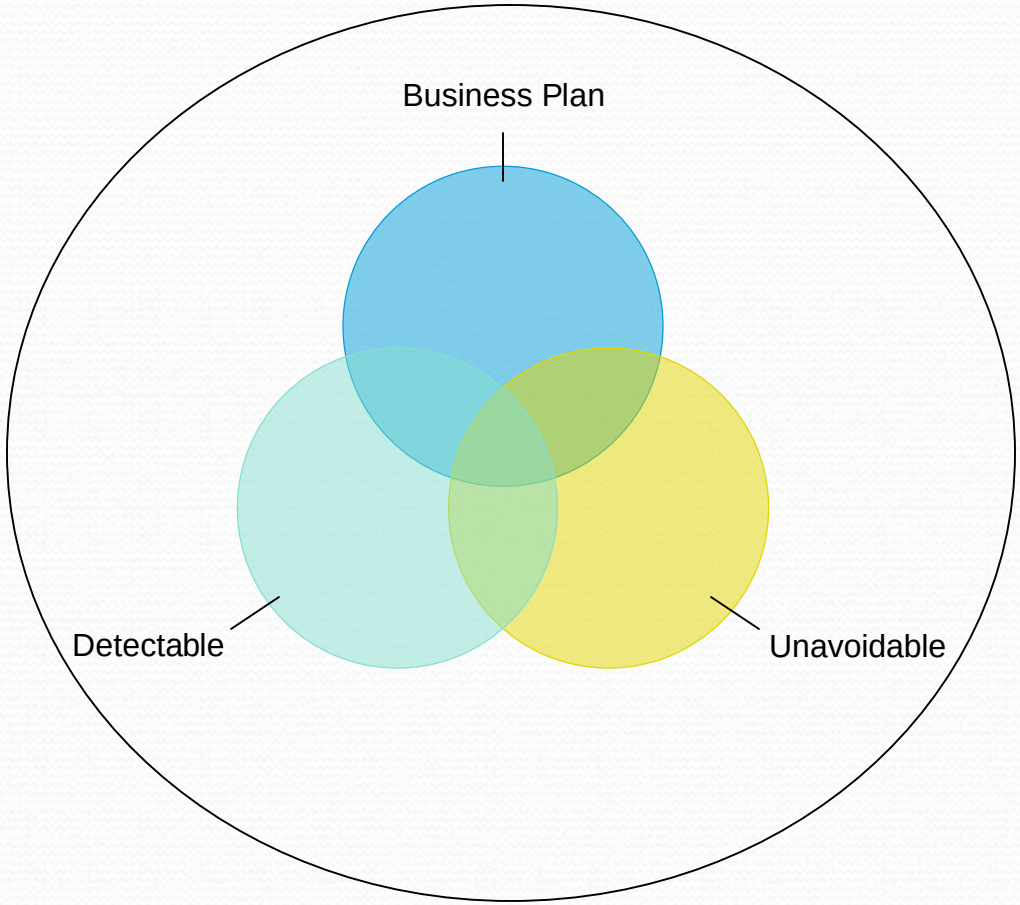
Licensing Bull's-eye Part I



Licensing Bull's-eye Part II

- Test for a licensable claim
  - Is it DETECTABLE?
  - Is it UNAVOIDABLE?
  - Is it or will it be in someone's BUSINESS PLAN?
    - Your business plan
    - Competitor's business plan

Licensing Bull's-eye Part II



Practical Tips

- Apply the three part test
- Ask questions of inventor(s)
  - How would you detect use of this invention?
  - Consider patenting the test for detecting.
  - What is the market for this invention?
  - Do you happen to see that a portion of your invention could be in a high profit area?

Practical Tips

- Select your attorney wisely once three part invention is identified
  - Find an attorney interested in the invention as well as your business
  - Don’t hire a “cheap” attorney
- Other tips
  - Employ cheap insurance – keep patent pending so you can zero in on a competitor
  - Crystal ball club
  - Facilitator

Examples

The following examples illustrate how you, as a non-patent attorney, can add value to the patent application by applying your business knowledge to the creation of the patent application or grant of a patent

- Detectability
- Design Around
- Single Infringer
- System Claims vs. Article Claims
- Create Claims to Cover Businesses
- Temporal Limitations

Example #1 - DETECTABILITY

- Semiconductor Fabrication

9. A method of uniformly removing silicon oxide, comprising:

providing an intermediate semiconductor device structure comprising a semiconductor substrate having a plurality of trenches therein, each of the plurality of trenches filled with silicon oxide and separated from an adjacent trench of the plurality of trenches by a conductive material, wherein the silicon oxide in at least one of the plurality of the trenches has a first property and the silicon oxide in the remaining trenches of the plurality of trenches has a second, different property; and

substantially uniformly removing the silicon oxide having the first property and the silicon oxide having the second property such that an exposed surface of the silicon oxide having the first property and the silicon oxide having the second property is discontinuous with an exposed surface of the conductive material.

Example #1 - DETECTABILITY

- No way to determine if competitor is performing step of "providing an intermediate semiconductor device structure."
- Problem with method claims if end product does not show a step
- Can this be inferred from end product?
  - Equally as likely that that semiconductor is made by a negative process (etch) vs. a positive process (deposit)
- If can't detect, consider TRADE SECRET
  - Formula for Coca-Cola
    - Trade Secret = unlimited duration

Example #2 – DESIGN AROUND

- Semiconductor Fabrication

9. A method of uniformly removing silicon oxide, comprising:

providing an intermediate semiconductor device structure comprising a semiconductor substrate having a plurality of trenches therein, each of the plurality of trenches filled with silicon oxide and separated from an adjacent trench of the plurality of trenches by a conductive material, wherein the silicon oxide in at least one of the plurality of the trenches has a first property and the silicon oxide in the remaining trenches of the plurality of trenches has a second, different property; and

substantially uniformly removing the silicon oxide having the first property and the silicon oxide having the second property such that an exposed surface of the silicon oxide having the first property and the silicon oxide having the second property is discontinuous with an exposed surface of the conductive material.

Example #2 – DESIGN AROUND

- Easy design around
  - each of the plurality of trenches filled with silicon oxide
  - each of the plurality of trenches separated by conductive material
  - Make a trench not filled with silicon oxide (mask one trench)
- Patent Profanity
  - Each
  - All
  - Every
  - Must
  - Required

Example #3 – SINGLE INFRINGER

- Generally Patent Direct Infringement Requires a SINGLE INFRINGER to have all elements of apparatus claim or perform all elements of method claim
- Problem arts:
  - modern communication systems
  - modern computer systems
  - remote medical systems
  - diagnosis systems

Example #3 – SINGLE INFRINGER

BMC Resources, Inc. v. Paymentech 498 F. 3d 1373(Fed. Cir. 2007)

6. A method of paying bills using a telecommunications network line connectable to at least one remote payment card network via a payee's agent's system, wherein a caller begins session using a telecommunications network line to initiate a spontaneous payment transaction to a payee, the method comprising the steps of:

prompting the caller to enter a payment number selected from one or more choices of credit or debit forms of payment;

prompting the caller to enter a payment amount for the payment transaction;

Example #3 – SINGLE INFRINGER

BMC Resources, Inc. v. Paymentech 498 F. 3d 1373(Fed. Cir. 2007)

accessing a remote payment network associated with the entered payment number, the accessed remote payment network determining, during the session, whether sufficient available credit or funds exist in an account associated with the entered payment number to complete the payment transaction, and upon a determination that sufficient available credit or funds exist in the associated account, charging the entered payment amount against the account associated with the entered payment number, adding the entered payment amount to an account associated with the entered account number, and storing the account number, payment number and payment amount in a transaction file of the system.

Example #3 – SINGLE INFRINGER

- Claim covers a method for processing debit transactions between a merchant and a customer, using a touch-tone telephone without using a PIN.
  - Infringement required action by three parties:
    - the company offering the PIN-less debit payment services (Paymentech)
    - a debit network, and
    - a financial institution.
  - The parties agreed that other parties , not Paymentech, performed at least three steps of the patented process.
- No Single Infringer = No Infringement* (no license)

Example #3 – SYSTEM VS. ARTICLE

- Article Claims
  - Protect replacement part market
  - Protect use of inventive article in other machines/uses
- System Claims
  - Expand royalty base
    - Article net sale - $10
    - System net sale - $100
  - Easier for business people to see that patent claim reads on their device
    - We purchase that product from supplier, we don't know if we infringe

Example #3 – SYSTEM VS. ARTICLE

- System Claim

1. A printer apparatus, comprising:

    a printer; and

    a print cartridge coupled to the printer, the printer cartridge including A, B, and C.

- Article Claim – capture after system sale replacement market

2. A printer cartridge including A, B, and C.

Example #4 – CLAIM IN COMPETITOR/LICENSEE SPACE

- Assume you have a new invention for the treatment of prostrate disease (e.g., benign prostatic hyperplasia (BPH)).
- Patent should:
  - Protect your technology
  - Read your technology onto the companies in this technology area
    - Prostalund
    - Urologix
    - American Medical Systems
    - Boston Scientific

Example #4 - Prostralund

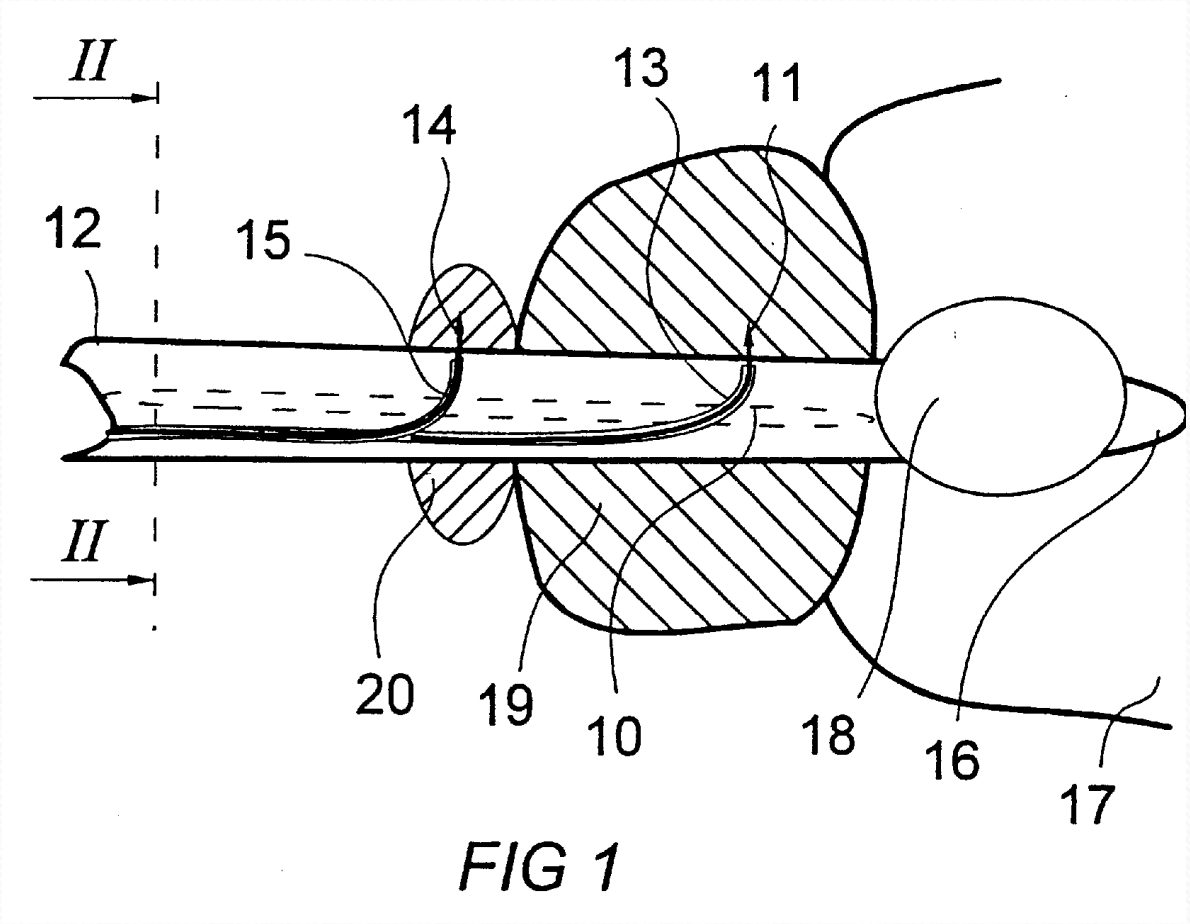
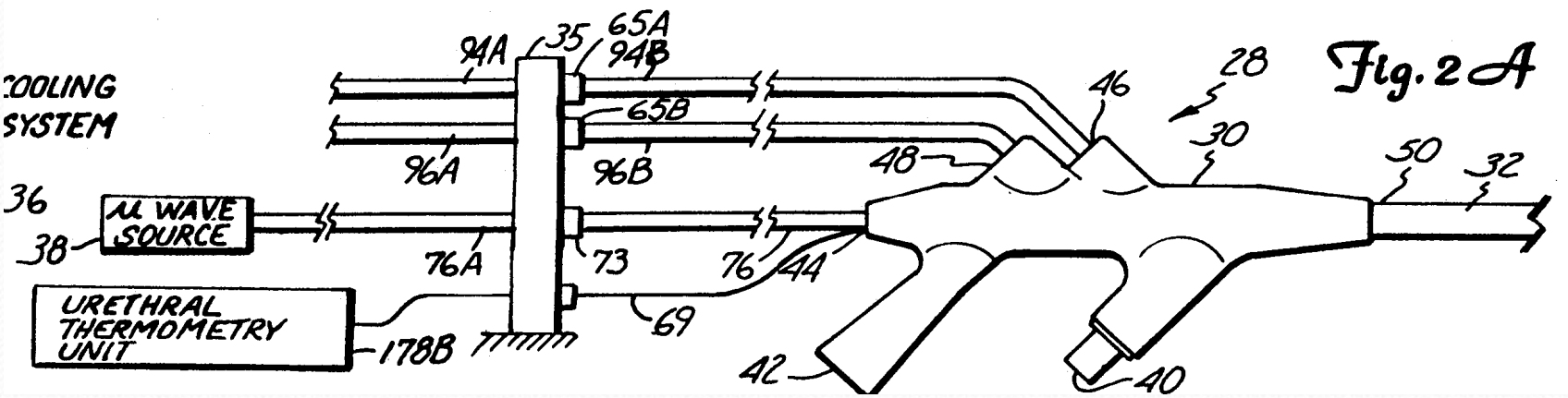


FIG 1

Example #4 - Urologix



Example #5 – Temporal Limitations

- Avoid temporal limitations in your claims
  - Are these necessary/unavoidable?
    - Would device/process work without time limitations?
    - Is device operable but not as “good” if time limitations removed?
  - Example Language to Critically Review
    - Predetermined
    - If, then statement
- Case Law
  - PlanetBingo v. Gametech US Pat. No. 5,482,289
  - Koito Manufacturing v. Turn-Key-Tech U.S. Pat. No. 5,045,268

PlanetBingo v. Gametech US Pat. No. 5,482,289

2. The method of playing a game of bingo comprising:

a) providing a player with a bingo card having a plurality of numbered spaces formed as a matrix having five rows and five columns used in the play of a five-by-five bingo game;

b) providing a plurality of bingo balls each having individual numbers corresponding to the numbered spaces on the bingo card;

c) a player making a first wager to be eligible for the five-by-five bingo game,

d) a player making a second wager to be eligible for a progressive jackpot;

e) randomly selecting consecutive bingo balls;

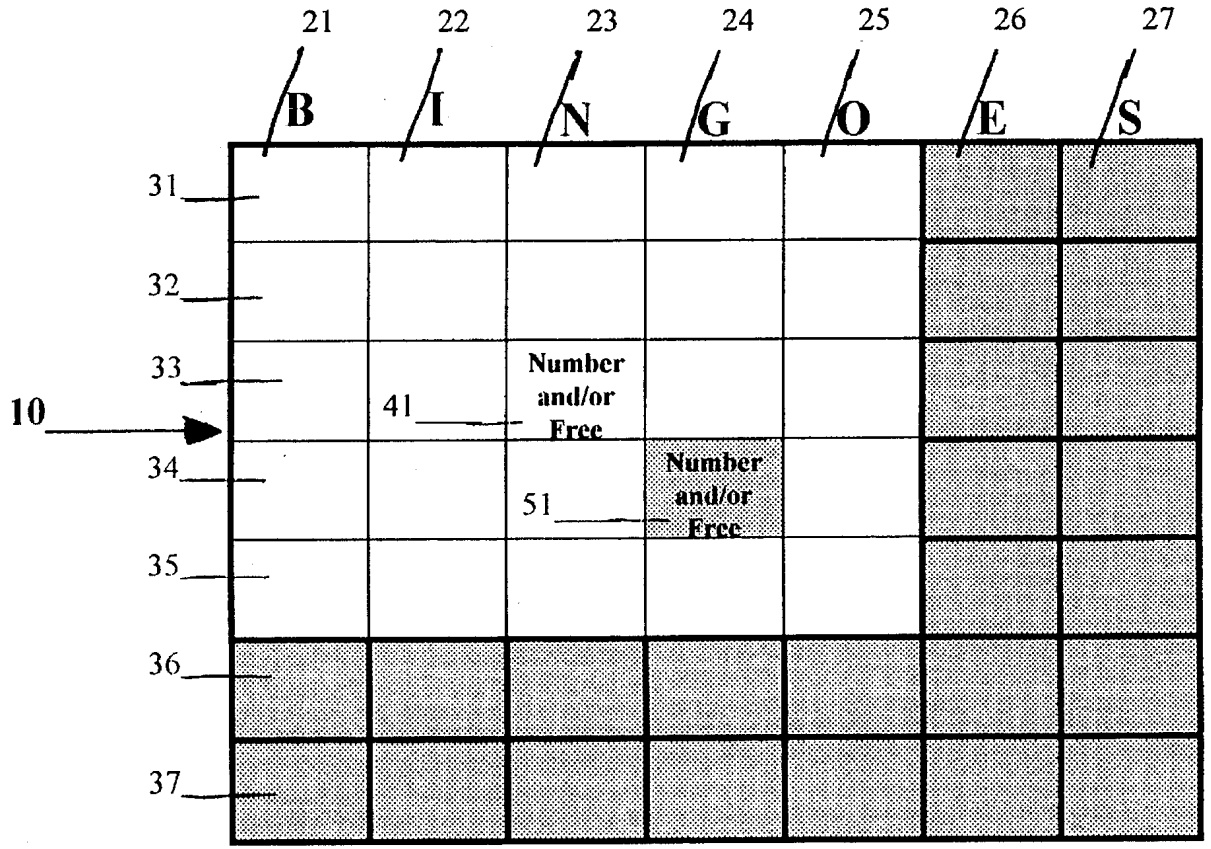
f) awarding a first preselected amount when the player achieves a predetermined winning combination on the five-by-five matrix of the bingo card;

g) designating a portion of the second wager to a separate progressive jackpot pool;

h) establishing a predetermined combination as a winning combination for the progressive jackpot pool; and

i) awarding the progressive jackpot pool to the player when he achieves the predetermined winning combination on the bingo card.

PlanetBingo v. Gametech US Pat. No. 5,482,289



Koito Manufacturing v. Turn-Key-Tech
U.S. Patent No. 5,045,268

1. A method of injection molding a plastic product, with a cross-laminated section that includes a first plastic layer and a second plastic layer, in a mold system comprising a first mold cavity with a first-layer-defining-mold-cavity-section and a second mold cavity with a second-layer-defining-mold-cavity-section with a second-cavity-section-wall, the method comprising the steps of:

(a) injecting a quantity of first plastic into the first mold cavity so that the first plastic follows in the first-layer-defining-mold-cavity-section in a first predetermined general direction,

(b) solidifying at least partly the flowed first plastic in the first-layer-defining-mold-cavity-section to thereby form said first plastic layer having a first-direction-flow-record,

(c) adjusting the mold system to thereby provide the second mold cavity with the second-cavity-section-wall including said first plastic layer,

Koito Manufacturing v. Turn-Key-Tech U.S. Patent No. 5,045,268

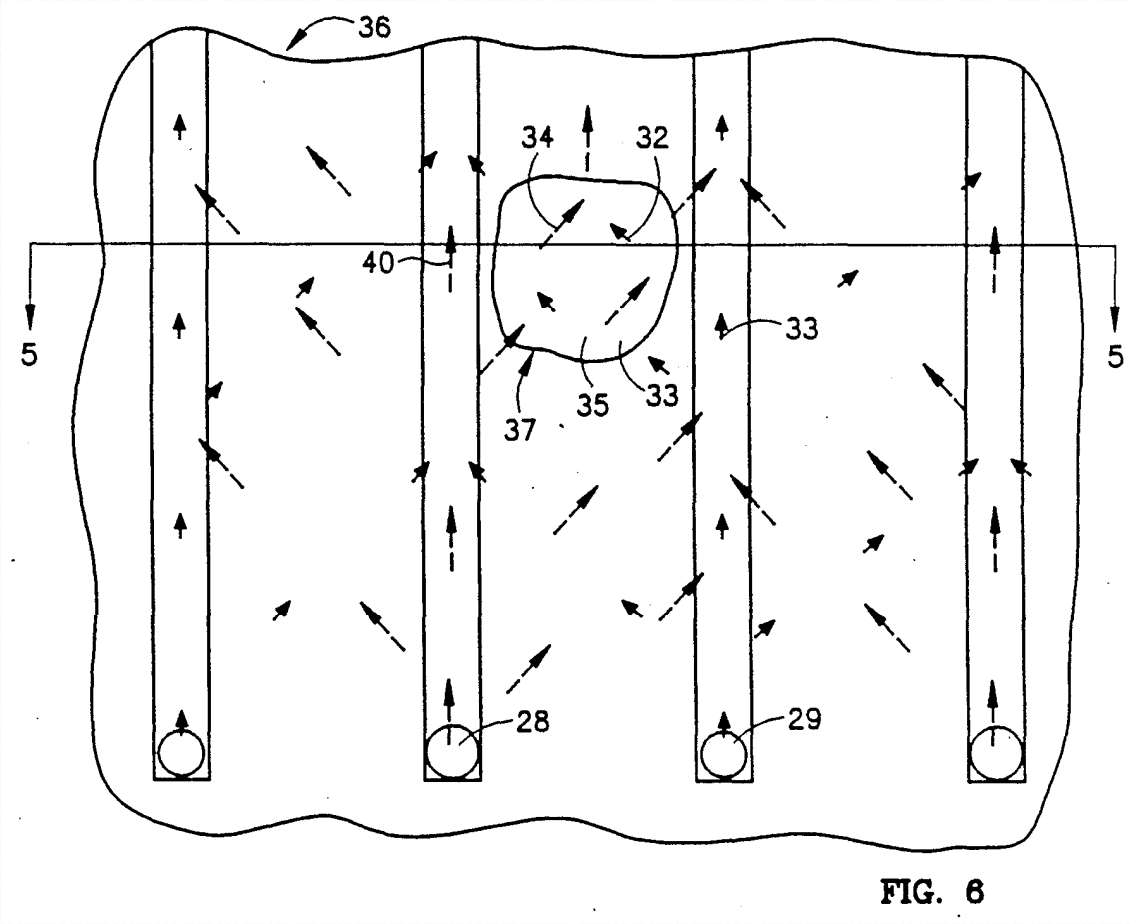


FIG. 6

Example #5 Temporal Limitations

- PlanetBingo v. Gametech
  - PlanetBingo was licensee of the above patent
  - Court interpreted “predetermined” to mean “determined beforehand”
  - No infringement as accused infringer (Gametech) did not predetermine winning combination, waited until game started
- Koito Manufacturing v. Turn-Key-Tech
  - Koito did not infringe as it never determined (beforehand) flow of plastic in the molds

Example #5 Temporal Limitations

- Same argument can be made against any "predetermined" element of a patent claim
  - We do not determine beforehand
  - We determine after the point you state in your patent (possible argument based on specification)
  - Design Around – Temporal limitations are AVOIDABLE!

Conclusion (1)

- You, as a licensing professional, have much to add to patent applications.
  - Review each claim term critically
    - Detectability
    - Design Around
    - Temporal limitations
    - Patent Profanity (all, each, must, etc.)
    - Clarity
    - Single Infringer

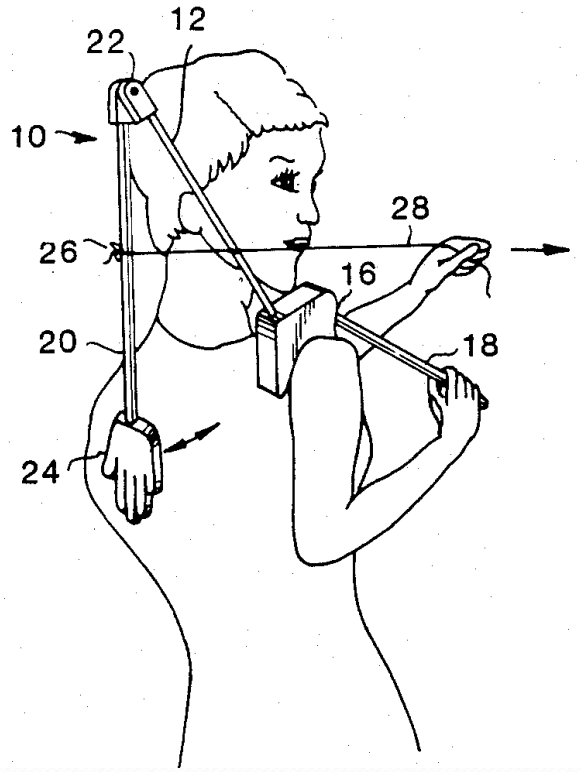
Conclusion (2)

- You, as a licensing professional, have much to add to patent applications.
  - Your Knowledge helps create licensable patent claim:
    - Knowledge of business purpose
    - Knowledge of business landscape – Claims to All businesses in technology space (Medtronic, St Jude, Boston Scientific)
    - Knowledge of past arguments for/against a license

Thanks

U.S. Patent Sep. 2, 1986 4,608,967

FIG. 1



Presented By

Tim Clise is an attorney-at-law specializing in the acquisition and enforcement of Intellectual Property. His practice is focused on patent protection for electronics, software, medical devices, automotive technology, and telecommunications technology, and related opinion and licensing matters, for both Fortune 500 clients and small companies. Tim also practices in the area of Trademarks. Tim received his B.S. in Electrical Engineering in 1992 from Michigan State University and his law degree from the University of Dayton in 1995. He has spoken widely on patent protection in Japan, Korea, Europe, and the United States. Tim is a member of the European and Japanese practice committees of the American Intellectual Property Law Association and a member of FICPI.

Presented By

Rich Billion currently practices intellectual property law with an emphasis in computer hardware and software, medical devices, and other mechanical and electro-mechanical devices. Rich has extensive experience in applying patents in licensing situations. IBM recognized him for "Excellence in Licensing" during his employ. Rich earned a degree in law (JD) and a Masters in Business Administration (MBA) from the University of South Dakota. He earned a Bachelor of Science in Mechanical Engineering with Highest Honors from South Dakota State University. Rich spent about half of his career as an in-house attorney for several major corporations including IBM, Exxon, Control Data, and Fair Isaac. His experiences and education make him keenly aware of the business aspects of patents.

For Further Information

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