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CS-202: Law For Computer Science Professionals

Class 2: Patents

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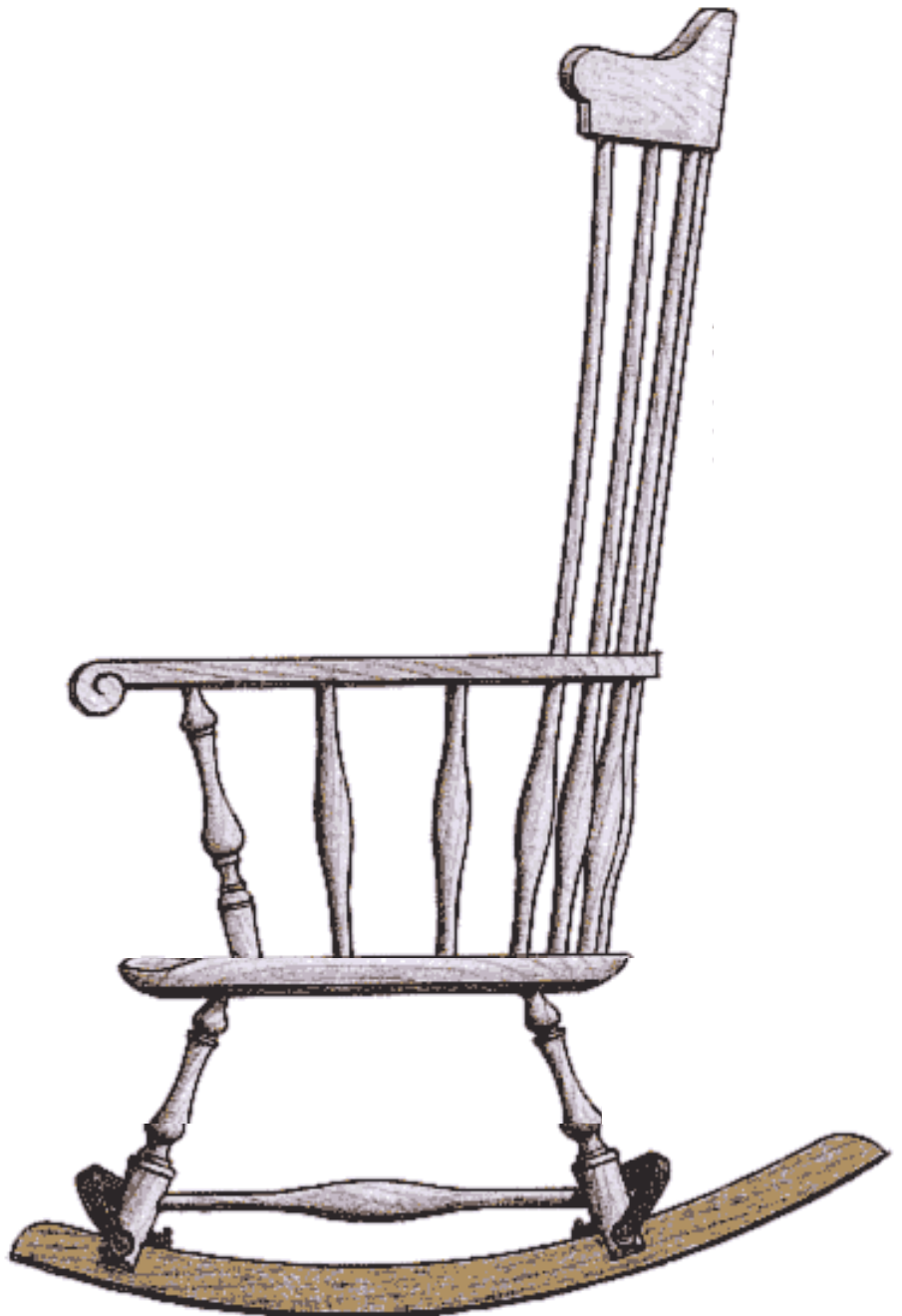
The Patent Right

- A patent is a type of property right.
- A patents grants the inventor the *right to exclude* others from making, using, selling, offering to sell or importing the invention in the US for a limited period of time.
- It is up to the patent holder to enforce his or her own rights if a patent is granted.

The Right To Exclude

“Back” Patent

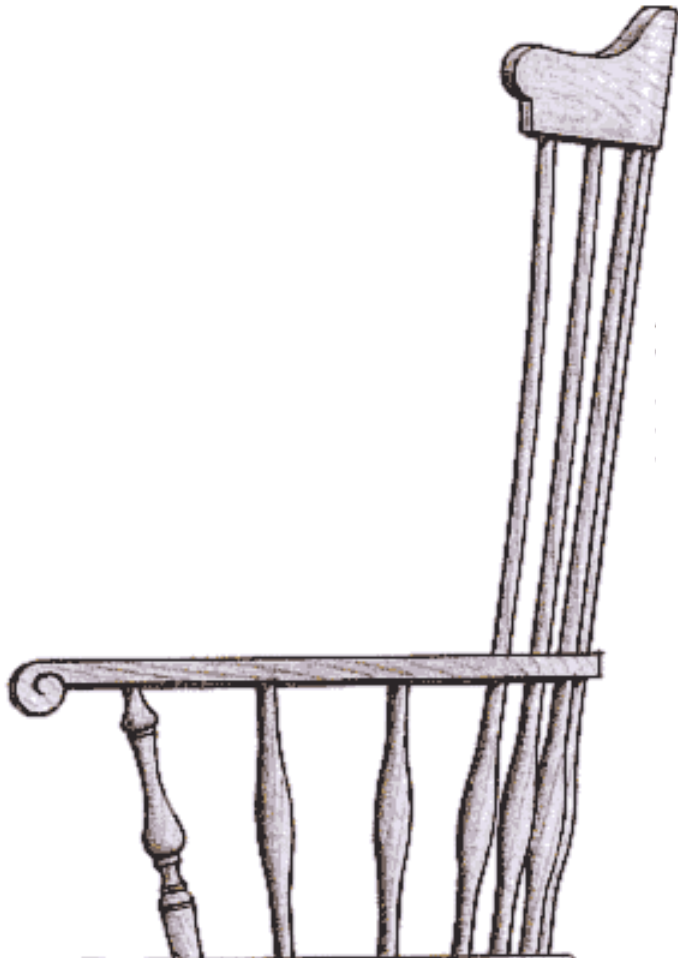
“Stool” Patent



“Rocker” Patent

The Right To Exclude

“Back” Patent



“Rocker” Patent

Patent Sources

U.S. Constitution, Art. 1, sec. 8:

“The Congress shall have 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”

The Patent Act: U.S. patent laws were enacted by Congress under its Constitutional grant of authority to protect the discoveries of inventors.

- [54] **METHOD OF CONCEALING PARTIAL BALDNESS**
- [76] Inventors: **Frank J. Smith**, 233 Cosmos Drive;
Donald J. Smith, 517 Brockway Ave., both of Orlando, Fla. 32807
- [22] Filed: **Dec. 23, 1975**
- [21] Appl. No.: **643,681**
- [52] U.S. Cl. **132/53**
- [51] Int. Cl.⁷ **A41G 3/00**
- [58] Field of Search 132/53, 54, 9, 7, 5;
2/9

- [56] **References Cited**
- UNITED STATES PATENTS**
- 3,317,921 5/1967 Zarzour 2/9
- 3,464,424 9/1969 Buzzelli 132/7
- 3,811,453 5/1974 Bretton 132/53

Primary Examiner—G.E. McNeill
Attorney, Agent, or Firm—John B. Dickman, III

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

5 Claims, 6 Drawing Figures





FIG. 1

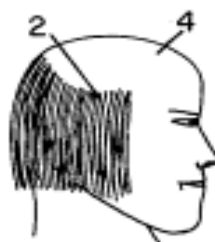


FIG. 2

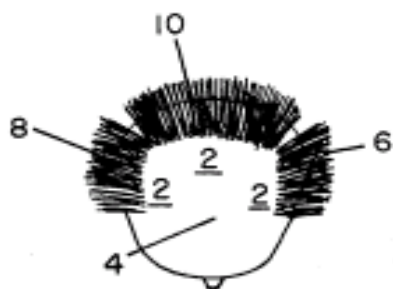


FIG. 3



FIG. 5



FIG. 4



FIG. 6

The Patent Act

Title 35, US Code

- The main body of law concerning patents is found in Title 35 of the United States Code.
- What constitutes “patentable subject matter” is broad.
- In order to be patented an invention must be:
 - New,
 - Useful, and
 - Not obvious.

Patentable Subject Matter

Title 35, § 101, “Inventions patentable.”

“Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor”

- Now includes “design” and “plant” patents.

“New”

Title 35, § 102 – “Conditions for patentability; novelty and loss of right to patent.”

A person shall be entitled to a patent unless—

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent, or
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States, or . . .
- (f) he did not himself invent the subject matter sought to be patented . . .

“Useful”

Title 35, § 101, “Inventions Patentable.”

- Very low threshold.
- The invention must be “operable” – capable of doing the things claimed.
- Examples of inventions deemed “not useful”
 - ESP-enhancing “cage”
 - Perpetual motion machines (violate thermodynamics laws)
 - Cold fusion

“Non-obvious”

Title 35, § 103 – “Conditions for patentability; non-obvious subject matter.”

“A patent may not be obtained though the invention is not [“new” under section 102], if *the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. . . .*”

The Patent Term

- Patents previously issued for a non-renewable term of 17 years from the date of issuance.
- § 154 of Title 35 amended in 1995 based on the “Agreement on Trade-Related Aspects of Intellectual Property” (TRIPS) accompanying the Uruguay Round GATT.
- Patents are now issued for a non-renewable term of 20 years from the date of application.

The Application Process

The PTO

- The United States Patent and Trademark Office (PTO) is the government agency responsible for examining patent applications and issuing patents.
- The PTO determines whether a patent should be granted in a particular case.

PTO Procedure

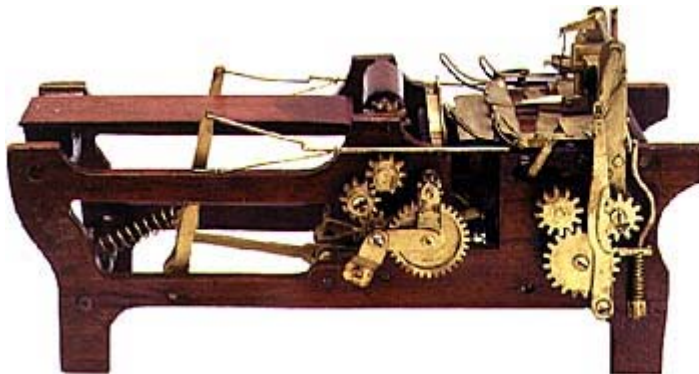
- Each patent application for an alleged new invention is reviewed by an Examiner to determine if it is entitled to a patent.
- Historically a model was required as part of a patent application.
- In most cases today, only a detailed specification is necessary.

Patent model of Isaac M. Singer's sewing machine, 1854

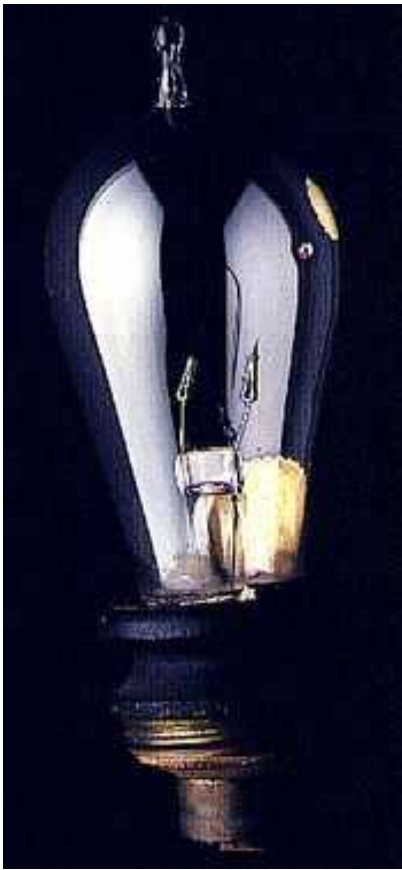
Singer's first sewing machine patent issued in August, 1851. Three years later he introduced a domestic model that made him one of the wealthiest Americans of the century. Singer's success came from his marketing genius. He aggressively advertised and sold his sewing machines to women through a nationwide chain of company stores, which featured demonstrations and offered repair service.



Margaret Knight's machine for making paper bags, 1879



Knight is credited with nearly 90 inventions and 22 patents.



Edison light bulb, 1886

Thomas Edison patented more than a thousand electrical and mechanical inventions. This lightbulb features a bamboo filament and was donated to the Smithsonian by Princeton's engineering department in 1961.

Samuel Morse's telegraph register, 1849



Morse began experimenting with electromagnetic telegraphy in the 1830s but did not achieve practical success until 1844, when he transmitted a coded message along a wire from Baltimore to Washington, D.C.

Procedure Upon Rejection

If a patent application is rejected, the Examiner's decision may be appealed to the PTO's Board of Appeals.

Further or alternative review is available from the United States Court of Appeals for the Federal Circuit, or in the United States District Court for the District of Columbia.

Patent Statistics

Issuance

- About 2 out of 3 ideas filed as utility patent applications eventually result in a patent.
- Patents issue on Tuesdays.
- Over 7,000,000 issued utility patents
- About 165,000 in 2004; 145,000 in 2005; ~120,000 to date in 2006.
- On average:
 - 14 months to first Office Action
 - Over 2 years to issuance

Invalidity

The PTO: Re-examination

- About 250 requests annually.
- Re-examination requests are successful at having the subject patent either narrowed or completely revoked roughly 70% of the time.
- About 12% of patents are ruled invalid.
- About 58% are narrowed
- About 30% are upheld as originally issued.

Invalidity

Federal Court: Litigation

- About 1% of all patents are involved in litigation.
- About 2,500 patent cases are filed each year.
- Only about 15% or less result in a court judgment.
- The rest settle before judgment.
- Less than 5% of patent claims invalidated in court.

The PCT

- In 1975 the Patent Cooperation Treaty (“PCT”) was incorporated into Title 35.
- The PCT is a method for obtaining patent protection in “PCT Contracting States.”
- List of “PCT Contracting States” attached as Exhibit A.
- The text of the PCT can be found at:

www.wipo.int/pct/en/texts/pdf/pct.pdf

Parts Of A Patent Application

Provisional Application

- Since 1995, the PTO has offered inventors the option of filing a “provisional” patent application.
- Designed to provide a lower-cost means to establish early filing date.
- “Provisional” patent application are not required to include claims, an inventor oath, or a prior art statement.
- The inventor has 12 months to file a complete utility application.
- The patent term can run for 20 years from the date of the non-provisional application.

The Title And Abstract

- The title of the invention (or an introductory portion stating the name, citizenship, residence of each applicant, and the title of the invention) should appear as the heading on the first page of the specification. The abstract enables the PTO and the public to determine quickly the nature of the technical disclosures of the invention.
- The abstract points out what is new in the art to which the invention pertains.
- The abstract should be in narrative form, it generally is limited to a single paragraph, and it must begin on a separate page.

(54) **WINE TASTING STRAW**

(76) Inventor: **David Alan Gates**, 117 Robin St.,
Napa, CA (US) 94558

(*) 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.: **10/206,487**

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

(51) **Int. Cl.**⁷ **A47G 21/18**; G03B 9/20

(52) **U.S. Cl.** **239/33**; 239/16

(58) **Field of Search** 239/33, 24, 16;
220/254.2, 254.8, 705, 707, 708, 710, 709

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,463,361 A *	8/1969	Cook et al.	222/144.5
3,718,282 A *	2/1973	Pizzoferrato	239/33
3,972,326 A *	8/1976	Brown	128/202.15
6,561,434 B2 *	5/2003	Kaplan	239/33

* cited by examiner

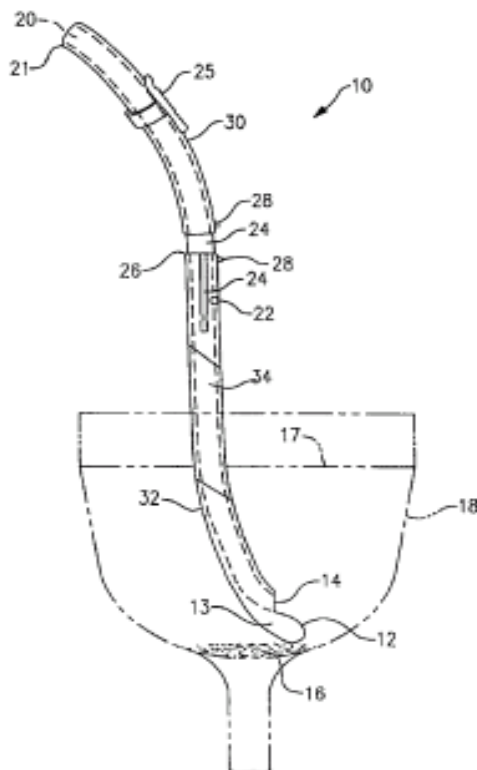
Primary Examiner—Davis Hwu

(74) *Attorney, Agent, or Firm*—Risto A. Rinne, Jr.

(57) **ABSTRACT**

An apparatus and method for the tasting of wine includes providing a conduit with an upper end and an opposite bottom end. The bottom end is sealed and preferably solid and it includes a first opening that is disposed slightly above the bottom end. The first opening is adapted to permit the wine, absent any sedimentation, to enter into the conduit when a partial vacuum is created at the upper end. A smaller second opening is provided between the upper end and the first opening that is adapted to introduce a quantity of ambient air into the conduit when a partial vacuum is created. The quantity of ambient air that is introduced is limited by the small size of the second opening to ensure that a partial vacuum sufficient to draw the wine through the conduit is maintained. The ambient air mixes with the wine that is passing through the conduit to aerate the wine in the conduit prior to its tasting.

15 Claims, 1 Drawing Sheet



A Short Detour



- home
- about wine prism
- wine prism conception
- technology transfer
- corporate gifts & wine clubs
- wine tasting cards
- order

The Interactive Wine Tasting Tool

WINE PRISM

Aerating Wine for Precise Evaluation

A take-anywhere personal decanting device that separates the various components of wine, revealing its positive characteristics as well as its flaws. Increases oxygen over 75% in wines already decanted while helping to reduce palate fatigue.

 **What others are saying
about the Wine Prism**



p.o. box 2771 napa, ca 94558 P 800.322.8878 F 707.224.5483

Product Conception

Based on the Venturi Flow System of aerating wine during fermentation, the Wine Prism was actually conceived of by a 4-year-old boy. One evening while his parents were enjoying a glass of wine, a young Dominic questioned his father about drinking his wine with a straw as he was doing with his milk. After being told that you want to mix a little bit of air with the wine to better taste and evaluate the wine, Dominic returned from the kitchen with a skewer and announced, "Dad, all you need to do is poke a hole in the straw to let in some air!"

Experiments in the lab and by experts in the wine industry have proven the efficacy of the Wine Prism. Since then the Wine Prism has been used in areas of the world from Argentina and Australia to France and Russia.

Patent law requires that all contributors to an invention must be listed on the patent application, which is what you see below, Dominic's signature as it appeared on the original application. And yes, with the sale of every Wine Prism, Dominic's college fund piggy bank receives a donation.



**IN THE UNITED STATES DEPARTMENT OF COMMERCE
BEFORE THE PATENT AND TRADEMARK OFFICE**

NOW COMES THE APPLICANTs in the patent application
being filed concurrently herewith and avers that:

Applicant:

DOMINIC MICHAEL GATES
Dominic Michael Gates

5-15-03
Date Signed

About The Product

Through a small aerating hole, air and wine are combined in the glass stem allowing the connoisseur to evaluate wine more precisely and consistently than by the common method of drawing in air by the "reverse whistle" technique.

By hyper-volatilizing the wine before it is altered by the pH in the mouth, the Wine Prism gives you a much more detailed examination of the various components of the wine: fruit, tannins, acidity, fermentation and barrel influence.

Not intended to replace casual wine drinking, the Wine Prism is made for critical evaluation of a wine's positive characteristics as well as its flaws that may shorten a wine's ageability and enjoyment.

Instructions for use: Place the Wine Prism into a glass of wine completely submerging the wine inlet port at the bottom of the glass stem. Then, draw wine up the Wine Prism by sucking with sufficient force so that a solid stream of wine is pulled up to the aerating hole. Make sure aerating hole is not covered by fingers.

Cleaning: The Wine Prism can be whisked clean between wines by holding the aerating hole closed and drawing in air with a quick burst. Rinse with water after use.



Napan develops device to help appreciate wine

Wednesday, November 26, 2003

By PAUL FRANSON
Register Correspondent

It's well known among wine connoisseurs that air -- and specifically oxygen -- can enhance the aromas of wine. That's part of the reason thoughtful restaurants decant older wines, and the reason Martini House also decants young wines.

Now a Napa inventor, David Gates, has developed a gadget that can enhance any wine by aerating the wine as you sip it. Amazingly, the idea came from his then 4-1/2-year-old son.

It's a simple device: a straw with a tiny hole that allows the wine to mix with air as you drink. It's obviously not for casual wine drinking, but for those who want to really understand and appreciate the subtleties of the wine.

Gates named his new device the wine prism, an analogy to the way a prism separates white light into its different components; he finds the wine prism highlights the flavors and nuances of the wine.

The wine educator is now selling the gadget in some wine tasting rooms and on line, and is talking to wine accessory retailers about carrying the wine prism in their catalogs.

In his full-time job, Gates manages the wine bar at Niebaum-Coppola, a place where you can sit at a table and enjoy a glass of wine instead of just tasting a sample. In his spare time, however, he likes to invent things. He earlier developed a sling used to pick up piles of leaves and perform other garden chores, for example.

The wine prism originated in a conversation Gates had with his son Dominic a year ago. Dominic suggested that his dad try drinking wine from a straw, as he liked to do with milk. His father explained that that isn't a good way to drink wine, because you don't get any air with the wine and that improves its flavor.

In response, Dominic, got a skewer and suggested poking a hole in the straw.

David did, and he had an epiphany. "It made all the flavors more obvious," he said.

He then experimented with the idea over time, including trying it out with winemakers and other wine experts at Niebaum-Coppola. They found that the device dramatically increased the amount of oxygen mixed with the wine compared to simply drinking it from a glass.

Interestingly, some experts find it is especially good for older wines, while others think the biggest benefit is with new wines. Ricardo Patlan, cellar master at Niebaum-Coppola Estate Winery, said, "The wine prism is a simple yet ingenious device that allows you to taste the change and character of wines as they mature."

Winemaker John Caldwell at Caldwell Vineyards said, "I have found the wine prism indispensable for evaluating the potential of younger wines during the blending process."

After being convinced that the idea worked, Gates applied for a patent, and in the process, discovered that everyone involved in the invention had to sign the application. That clearly included Dominic, so he wrote his name on large pieces of paper, and his father reduced them and printed them on the application forms. Gates recently learned that the patent will be issued, probably one of very few with the signature of a 5-year old. Not surprisingly, Dominic's college fund gets another addition with each wine prism sold.

The senior Gates jokes that he's patenting a leaky straw, but noted, "This shows the creativity that comes from an innocent mind that doesn't say 'I can't do this.'"

It took about one-and-a-half years to complete the development of the unit and he started selling it last month. The wine prism is fabricated from heavy laboratory-grade Pyrex glass tubing at a lab glass fabricator, while the metal clip ornamented with a grape cluster comes from back east. It's packaged in an elegant box similar to that used for fancy bracelets.

Gates' company is O2 Essential Ideas and he has other products in the works, too. The next is a wine glass with an attached perforated straw he calls the Iconoglas.

The wine prism is available at Niebaum-Coppola, Beaulieu Vineyards, the Napa General Store, and on Gates' company's Web site at: www.wineprism.com.

The Specification

- A written description of the invention and of the manner and process of making and using the invention.
- The specification must be in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which the invention pertains to make and use the invention.

Background Of The Invention

- This section should include a statement of the field of endeavor to which the invention pertains.
- This section may also include a paraphrasing of the applicable U.S. patent “Classification Definitions” or the subject matter of the claimed invention.
- For example, Classification 239/33
 - Portable drinking tubes and straws. Apparatus comprising tubular devices having openings at each end and being adapted for conducting fluids for drinking, one end being placed in the mouth and the other end being placed in the liquid during use.

Brief Summary Of The Invention

This section should present the substance or general idea of the claimed invention in summarized form

The summary may point out the advantages of the invention and how it solves previously existing problems, preferably those problems identified in the Background Of The Invention.

A statement of the object of the invention may also be included.

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention, in general relates to wine tasting and, more particularly, to devices that facilitate the testing and comparison of wines.

The comparison of wines is an important determination to wine producers. Accordingly, wine tasters, that is people with an especially acute awareness of wine qualities, judge the attributes of many different wines. Reports in magazines, articles in various publications, and even more important, the awarding of ribbons and ranking of wines is influential in determining the sales and price of various vintage wines as well as the renown of the wine producers.

It is also important to the wine tasters themselves to be optimally able to accurately determine the subtle differences that occur between the various wines if their opinion is to be well regarded. These subtle differences include complexities and flaws that the average person is unaware of.

Currently, wine tasters use a glass to swirl the wine and sample its aroma. A sip is followed by sucking air into the mouth through pursed lips in what is commonly known as a "reverse whistle". The mixing of the wine with air is also sometimes referred to as "volatizing the esters", which is a more technical term of the process.

The reverse whistle aerates the wine and it is the infusion of air that helps to reveal the wine's various complexities and also its flaws, especially the more subtle ones.

However, after thus having sampled a few different wines, the ability to differentiate naturally diminishes. Wine tasters currently cleanse the palette by either sipping water or by consuming crackers or bread between the various samplings. The more wine that is consumed the more difficult cleansing of the palette becomes. Therefore, it is clearly desirable to limit the quantity of wine that is required to be consumed so that cleansing of the palette is easier and more effective.

While it is not generally regarded as an issue, wine does include alcohol and it is conceivable also that it is desirable to reduce the quantity of alcohol (i.e., wine) that is consumed so as to ensure that the perception of the wine taster is not substantially affected by a potential increase in the blood alcohol content level.

However, aside from the quantity that is consumed there is another problem inherent in the above approach. Before aeration can occur the wine taster first must take a sip. Then the reverse whistle procedure is used to aerate the wine, as was described hereinabove.

The problem is that the reverse whistle is no longer able to aerate a pure, undistorted and undiluted sample of the wine. This is because the wine has already mixed with the saliva in the wine taster's mouth.

The saliva affects the acidity (i.e., the pH) of the wine and accordingly, the character of the wine itself is altered before it is ever critiqued. The wine taster is discerning not the essence of the pure, original wine, but to some extent, how that particular wine reacts with the chemistry of his own saliva. This can vary from taster to taster, only increasing the subjectivity of any test result.

When the taster is looking for the most subtle of differences for a great many wine attributes, this becomes a significant obstacle. The wine is also diluted to some extent by the saliva prior to aeration and subsequent analysis. Analyzing an aerated but diluted wine sample is certainly

not an optimum condition, yet this is all that the industry has had to rely upon thus far.

It is desirable to provide a device and method for tasting wines that is easy to use and inexpensive to manufacture and sell. This would permit amateur wine tasters to practice their art and improve their own ability to discern the various wines apart from each other.

Conventional straws are not used for a number of reasons, a principle one being related to sediments that accumulate at the bottom of a glass of wine. This concentration of sedimentation is to be avoided during tasting of the wine. Also, conventional straws would introduce far too much fluid for sampling.

There is a further need also and that is for aesthetics. Wine tasting is regarded much as an art form, and those who scrutinize wines regard themselves as experts in the field, artists skilled in the art of discerning subtle nuances of taste, hue, complexion, aftertaste, etc. Any device relied upon must be aesthetically appealing to the wine taster, as well as functional.

Accordingly, there exists today a need for a product and method of aerating a wine prior to tasting (i.e., sampling or critiquing) that infuses or mixes air with the wine before the wine makes contact with the saliva of the user. It is also desirable to be able to limit the quantity of wine that must be sampled.

Clearly, an apparatus that provides an aerated sample of undistorted wine would be a useful and desirable device.

2. Description of Prior Art

Wine tasting devices are not generally known. The only known prior art device that even vaguely resembles the instant invention is known as a "bombilla" which the dictionary of the Spanish Academy defines as a "thin tube that is used to suck the mate in America, it has about twenty centimeters long and half a centimeter of diameter and the end of the tube where the liquid is introduced is almond-like full of little holes, so that the infusion passes but not the dried leaves (yerba) of the mate."

While the structural appearance of the above described device, at first appearance, may have similarities with the present invention, it differs in material respects. These differences, which will be described in more detail hereinafter, are essential for the effective use of the invention and which admit of the advantages that are not available with the prior known device.

OBJECTS AND SUMMARY OF THE INVENTION

It is an object of the present invention to provide a wine tasting straw that is inexpensive to manufacture.

It is also an important object of the invention to provide a wine tasting straw that is adapted to aerate a beverage.

Another object of the invention is to provide a wine tasting straw that is adapted to aerate a wine.

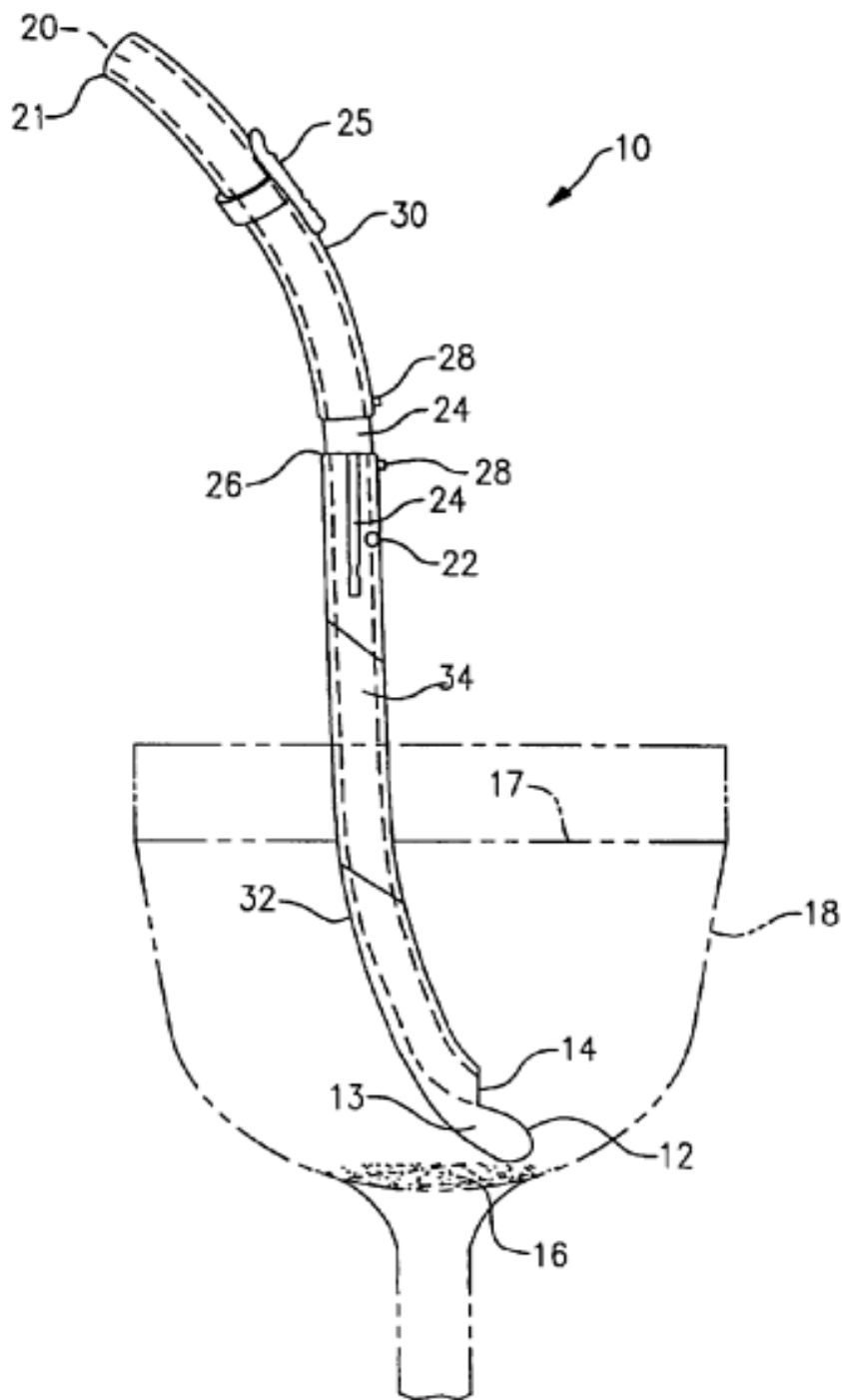
Still another object of the invention is to provide a wine tasting straw that is adapted to aerate a wine prior to the wine substantially contacting a quantity of saliva in a mouth of a user.

Still yet another object of the invention is to provide a wine tasting straw that is adapted to lessen a quantity of wine that is required for critiquing by a person skilled in the art of tasting wines.

Yet another important object of the invention is to provide a wine tasting straw that is adapted to lessen the difficulty of cleansing the palette of a person skilled in the art of tasting wines.

Drawings

- A patent application is required to contain drawings if drawings are “necessary for the understanding of the subject matter sought to be patented.”
- The drawings must show every feature of the invention as specified in the claims.



Description Of The Drawings

- If the application includes drawings, the application must include a listing of all figures by number (*e.g.*, Figure 1A)
- Must also include corresponding statements explaining what each figure depicts.

Wine Tasting Straw

BRIEF DESCRIPTION OF THE DRAWING

The drawing FIGURE is a side view of a wine tasting straw in a container of wine (container and wine in dashed lines).

Detailed Description Of The Invention

- This section explains the invention and the process of making and using the invention.
- It must set forth the invention in “full, clear, concise, and exact terms.”
- The invention ideally is distinguished from other inventions, and from what is “old.”
- In the case of an improvement, the description should be confined to the specific improvement and to the parts that necessarily cooperate with it or which are necessary to understand the invention.

Detailed Description Of The Invention

- The description must be sufficient to enable any “person of ordinary skill in the pertinent art, science, or area” to make and use the invention without “undue” experimentation.
- The “best mode” contemplated of carrying out the invention must be set forth in the description.
- Each element in the drawings should be mentioned in the description.
- This section is often titled "Description of the Preferred Embodiment."

Still yet another important object of the invention is to provide a wine tasting straw that automatically infuses air into the fluid stream as a wine is sucked through the straw.

Still yet another important object of the invention is to provide a wine tasting straw that does not draw sediments that have accumulated at the bottom of a container into an intake fluid stream.

A still further important object of the invention is to provide a method of infusing air into a fluid stream as a fluid is being sucked through a straw.

Briefly, a wine tasting straw that is constructed in accordance with the principles of the present invention has a hollow shaft with a first opening that is elevated above the bottom of the straw and is adapted for intake of a liquid (i.e., the wine). A second and smaller opening is disposed along the length of shaft and, during use, is disposed above the liquid. When a partial vacuum is created by sucking on an upper end of the straw, both wine and air are simultaneously drawn into the straw, thereby aerating the wine prior to its entry into the mouth of a taster (i.e., a user).

BRIEF DESCRIPTION OF THE DRAWING

The drawing FIGURE is a side view of a wine tasting straw in a container of wine (container and wine in dashed lines).

DETAILED DESCRIPTION OF THE INVENTION

Referring to the FIGURE is shown, a wine tasting-straw, identified in general by the reference numeral 10. The wine tasting straw 10 can be formed of any desired material and of any preferred size. A preferred material for the wine tasting straw 10 is glass and a preferred overall length is approximately seven inches. The only restriction is that the material used must not influence or affect the taste of the fluid that is being drawn through the wine tasting straw 10.

The wine tasting straw 10 includes a solid bottom 12 at a lower end thereof. A first opening 14 is disposed a predetermined distance above the solid bottom 12, for example one-quarter of an inch above the bottom 12. The reason the first opening 14 is elevated above the bottom of the wine tasting straw 10 is to prevent any sedimentation 16 from being drawn into the wine tasting straw 10 during use.

The sedimentation 16 precipitates from certain wines 17 and settles to the bottom of a container 18 (i.e., a glass shown in dashed lines). If the sedimentation 16 were to be consumed it would greatly color the flavor and prevent an accurate tasting from occurring.

The bottom 12 is preferably smooth and rounded as well. This shape further improves aesthetic appeal. The bottom 12 includes a smooth interior 13 that is formed of a solid material (i.e., glass) that eliminates pockets and corners where the wine 17 might otherwise collect and pool, thereby distorting subsequent samples through the introduction of a residual quantity of the wine 17 from a previous tasting.

The wine tasting straw 10 includes a hollow core 20 that begins at an upper end 21 and which extends to the first opening 14. The wine tasting straw 10 acts as a conduit from the upper end 21 to the first opening 14 and is used to convey the wine 17 that enters the wine tasting straw 10 at the first opening 14, passing through the hollow core 20 and out the upper end 21 when a user (not shown) places his or her lips around the upper end 21 and draws (i.e., sucks) from the upper end 21. This action creates a partial vacuum in the wine tasting straw 10 that draws the wine 17 in through the

first opening 14 and up through the wine tasting straw 10 as was described hereinabove.

The first opening 14 is sufficiently large so as to readily allow the intake of a fluid to occur therein.

Disposed along the longitudinal length of the wine tasting straw 10 intermediate the upper end 21 and the first opening 14 is a second opening 22.

The second opening 22 extends through the wall of the wine tasting straw 10 into the hollow core 20. The second opening 22 is considerably smaller in diameter than is the first opening 14 and preferably, should not exceed one-sixteenth of an inch in diameter.

In use the second opening 22 is disposed above the wine 17 and is open to ambient air.

When the user sucks on the upper end 21, the second opening 22 is too small to instantly replenish the air that is initially being drawn out of the wine tasting straw 10 (i.e., the hollow core 20). Accordingly, a partial vacuum is created and maintained sufficient to also draw the wine 17 in through the first opening 14 and up along the length of the hollow core 20.

If the second opening 22 were made too large, the wine tasting straw 10 would not operate because any partial vacuum would then be insufficient to also force, because of an insufficient difference between ambient air pressure and the pressure in the hollow core 20, the wine 17 to enter at the first opening 14 and travel upward and through the entire length of the hollow core 20.

When the wine 17 rises to the level of the second opening 22, the ambient air that is simultaneously being drawn into the hollow core 20 mixes with the wine 17 and automatically aerates it. This aeration occurs prior to the wine 17 contacting any saliva or other substances that may be present in the mouth of the user, thereby ensuring that an accurate, undistorted tasting of an aerated sample of the wine 17 can occur.

Furthermore, because the size of the second opening 22 in comparison to the first opening 14 is fixed and because this ratio determines the air/wine 17 mixture that is drawn into the wine tasting straw 10, all samples taken are uniformly aerated, thereby removing this as a potential source of variability such as would occur if the user were to draw more or less air into his mouth using instead the prior art "reverse whistle" process.

Furthermore, only a small quantity of the wine 17 need be sampled making it much easier to cleanse the palette. Accordingly, the user can more accurately critique various samples.

The wine tasting straw 10 itself does not pool the wine 17 and may readily be used to sample another type of wine (not shown). If desired, it can be rinsed out, shaken, or cleaned in any preferred way.

Enhancements made to the wine tasting straw 10 include a clip 24, similar to a type of clip (not shown) that is used to secure a pen to a shirt pocket (not shown). Similarly, the wine tasting straw 10 may be secured to a shirt pocket by use of the clip 24.

The clip 24, as shown, is plain in appearance. Ornamentation 25 can be added separately to the wine tasting straw 10 or it can be included within the design of additional modified types of clips (not shown). The ornamentation 25 preferably includes a grape cluster and it is also preferable to provide an enlarged area on an upper portion of the ornamentation 25 that resemble a grape leaf and which can be used as a finger rest during use.

The clip 24 is preferably secured along the longitudinal length of the wine tasting straw 10. A recess 26 is provided

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into which a band portion of the clip **24** contracts and fits. Alternately, a pair of raised protrusions **28** can be used to secure the clip **24** along the longitudinal length of the wine tasting straw **10**. How the clip **24** is secured is a matter of design choice.

The preferred shape for the wine tasting straw **10** includes at least one upper curved portion **30** and preferable also a lower curved portion **32** so as to resemble an "S" in shape. This is more aesthetically appealing than a purely linear configuration, although a linear configuration (not shown) would certainly function well.

To further improve aesthetics, the wine tasting straw **10** may include a plating **34**, for example a gold plating, over any desired portion.

The invention has been shown, described, and illustrated in substantial detail with reference to the presently preferred embodiment. It will be understood by those skilled in this art that other and further changes and modifications may be made without departing from the spirit and scope of the invention which is defined by the claims appended hereto.

What is claimed is:

1. A wine tasting straw, comprising:

- (a) a conduit that includes an opening at each end thereof; and
- (b) an opening through a wall of said conduit that is disposed intermediate said each end of said conduit, wherein said opening through a wall includes a cross-sectional area that is smaller than a cross-sectional area of said opening at each end thereof and wherein when a first end of said conduit is disposed in a fluid sufficient so that a lower one of said openings at each end is disposed in said fluid, said opening through a wall of said conduit is not disposed in said fluid.

2. A wine tasting straw, comprising:

- (a) a shaft that includes an upper end and an opposite bottom end, wherein said bottom end is sealed, and wherein said shaft includes a hollow core that begins at a first opening and wherein said first opening is disposed a predetermined distance above said bottom end, and wherein said hollow core extends along a longitudinal length of said shaft to said upper end; and

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- (b) a second opening that is disposed between said first opening and said upper end, wherein said second opening includes an area that is smaller than the area of said first opening.

3. The wine tasting straw of claim **2** wherein said wine tasting straw is formed of a glass.

4. The wine tasting straw of claim **2** wherein said shaft includes a curved portion.

5. The wine tasting straw of claim **4** wherein said shaft includes a second curved portion.

6. The wine tasting straw of claim **5** wherein said shaft includes an S shape thereto.

7. The wine tasting straw of claim **2** wherein said second opening includes a diameter that does not exceed one-sixteenth of an inch.

8. The wine tasting straw of claim **2** wherein said bottom end is solid.

9. The wine tasting straw of claim **2** wherein said first opening is adapted for placement into a fluid and wherein said second opening is not adapted for placement into said fluid when said first opening is disposed in said fluid.

10. The wine tasting straw of claim **9** wherein said fluid includes a wine.

11. The wine tasting straw of claim **9** wherein said wine tasting straw is adapted for use in transporting said fluid into said first opening, through said hollow core, and out of said upper end when a partial vacuum is created at said upper end.

12. The wine tasting straw of claim **11** wherein said second opening is adapted to permit a quantity of ambient air to enter into said hollow core at said second opening and mix with a quantity of said fluid in said hollow core sufficient to produce a quantity of aerated fluid.

13. The wine tasting straw of claim **2** including a clip that is secured to said shaft, wherein said clip is adapted to secure said wine tasting straw to an object.

14. The wine tasting straw of claim **2** including an ornamental design that is attached to said shaft.

15. The wine tasting straw of claim **2** including a plating that is applied to said shaft.

* * * * *

The Claims

- The claims must “particularly point out” and “distinctly claim” the subject matter of the invention.
- The claims define the scope of the protection of the patent.
- Whether a patent will be granted is determined, in large measure, by the choice of wording of the claims.
- A non-provisional utility patent application must contain at least one claim.

The Claims

- The claims section must begin with a statement such as
 - "What I claim as my invention is: . . . ,“or
 - "I (We) claim:“
- Followed by the recitation of the particular matter the inventor regards as the invention.
- One or more claims may be presented in “dependent” form (referring to and further limiting another claim).
- Each claim should be a single sentence, and each claim element or step should be separated by a line indentation.

“Independent” Claims

2. A wine tasting straw, comprising:
 - (a) a shaft that includes an upper end and an opposite bottom end, wherein said bottom end is sealed, and wherein said shaft includes a hollow core that begins at a first opening and wherein said first opening is disposed a pre-determined distance above said bottom end, and wherein said hollow core extends along a longitudinal length of said shaft to said upper end; and
 - (b) a second opening that is disposed between said first opening and said upper end, wherein said second opening includes an area that is smaller than the area of said first opening.

“PageRank” Patent, Claim 1

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What is claimed is:

1. A computer implemented method of scoring a plurality of linked documents, comprising:

obtaining a plurality of documents, at least some of the documents being linked documents, at least some of the documents being linking documents, and at least some of the documents being both linked documents and linking documents, each of the linked documents being pointed to by a link in one or more of the linking documents;

assigning a score to each of the linked documents based on scores of the one or more linking documents and processing the linked documents according to their scores.

“Dependent” Claims

3. The wine tasting straw of claim 2 wherein said wine tasting straw is formed of a glass.
4. The wine tasting straw of claim 2 wherein said shaft includes a curved portion.
5. The wine tasting straw of claim 4 wherein said shaft includes a second curved portion.
6. The wine tasting straw of claim 5 wherein said shaft includes an S shape thereto.
7. The wine tasting straw of claim 2 wherein said second opening includes a diameter that does not exceed one-sixteenth of an inch.

Oath Or Declaration

- The oath or declaration must identify the application with which it is associated, and must give the name, city, and either state or country of residence, country of citizenship, and mailing address of each inventor.
- Must state whether the inventor is a sole or joint inventor of the invention claimed.
- The oath or declaration must be signed by all of the actual inventors.

Who Can File Patent Applications

Who Can File An Application?

- The application process is complicated and requires detailed knowledge of patent law as well as PTO rules and procedure.
- Inventors may prepare and file their own applications, and conduct the PTO proceedings themselves.
- Unless they are familiar with the law and PTO procedures, this might cause considerable difficulty.

Who Can File An Application?

- Most inventors employ the services of registered patent attorneys or patent agents.
- The PTO registers both attorneys and persons who are not attorneys.
- The former are referred to as “patent attorneys.”
- The latter are referred to as “patent agents.”
- Patent agents cannot conduct patent litigation or other “legal” services (*e.g.*, drafting a license)

Admission To The PTO Bar

Following are the requirements for admission to practice before the PTO:

- You must be of good moral character and of good repute.
- You must have the legal, and scientific and technical qualifications necessary to render applicants for patents a valuable service.
- You must be pass an examination given by the PTO.
- You must have a college degree in engineering or physical science or the equivalent of such a degree.