

Drafting a Provisional Application

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Outline

- Why file a Provisional Application?
- Attributes of a well-written application
- Legal Requirements
- Provisional Application Drafting Ideas/Tips
- Provisional Applications
 - Filing Requirements
 - Strategic Uses/Basis for Priority
 - Pros and Cons

Provisional Utility Applications

(MPEP 201.04(b))

- Low cost submission to establish filing date
 - \$130 small entity
 - \$65 micro entity
- Micro entity certifies that he/she:
 - Qualifies as a small entity (less than 500 employees);
 - Has not been named as an inventor on more than 4 previously filed patent applications;
 - Did not, in calendar year preceding the calendar year in which the applicable fee is paid, have a gross income exceeding 3 times median household income; and
 - Has not assigned, granted, or conveyed (and is not under obligation to do so) a license or other ownership interest in the application concerned to an entity that, in calendar year preceding the calendar year in which applicable fee is paid, had a gross income exceeding 3 times the median household income.

Provisional Utility Applications

(MPEP 201.04(b))

- Automatic abandonment after one year
- Inventor given time to investigate market potential / **make improvements**
 - **be careful too much change could result in loss of provisional filing date**
- No patents rights—not examined
- Term patent pending allowed to be applied
 - Inventors may use term during time period after patent application (Provisional, Non-Provisional, Design, or Plant) has been filed, but before patent has issued

Provisional Utility Applications

- Claims and Oath/Declaration are not required
- Items required:
 - Specification in compliance with 35 USC 112, Paragraph (a) (enabled, written description, best mode)
 - Drawings (needed in almost all cases)
 - Filing fees
 - Cover Sheet identifying Provisional Application

USPTO Received 163,040 Provisional Applications in FY 2012

Benefit of Provisional Filing Date

- Non-Provisional **Utility** and **Plant** Applications can claim the benefit of Provisional Application filing date if Non-Provisional Application was filed within 12 months of the Provisional Application filing date
- No Provisional Design Applications
- A non-provisional application (regular) claiming the benefit of the provisional application must be adequately supported by the disclosure filed in the provisional application

–Note: A Non-Provisional Application can be filed without filing a Provisional Application

The “well-written” patent application

- What attributes should a well-written patent application have?
 - Describe invention so one of ordinary skill can understand (make and use)
 - Disclose the best mode
 - Provide support for claims of unknown scope
 - Claims narrow enough to avoid prior art
 - Claims broad enough to hamper design around

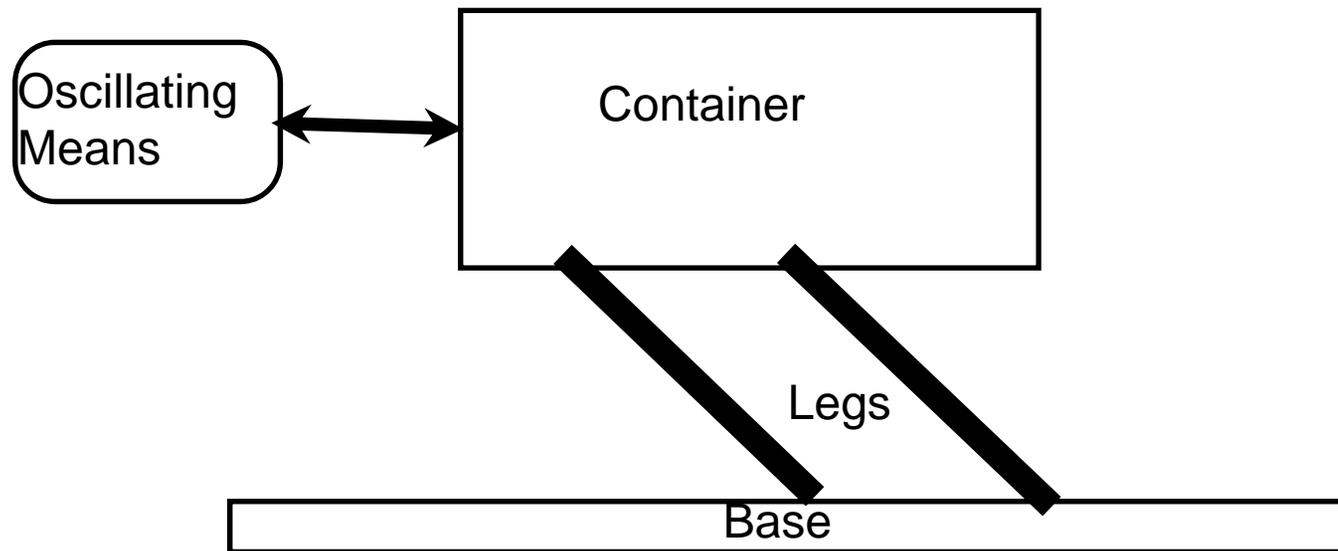
What is a claim?

- 35 U.S.C. 112: Specification shall conclude with **one or more claims** *particularly pointing out and distinctly claiming subject matter* which applicant regards as his invention.
- Parts of a claim – . . . where nature of case admits, as in the case of an improvement, any independent claim should contain in the following order:” 37 C.F.R. 1.75 (e)
 - Preamble
 - Transitional (Linking) Phrase
 - Body
- Order of claims - least restrictive claim should be presented as claim no. 1, and all dependent claims should be grouped together with claim or claims to which they refer to the extent practicable. 37 C.F.R. 1.75 (g).

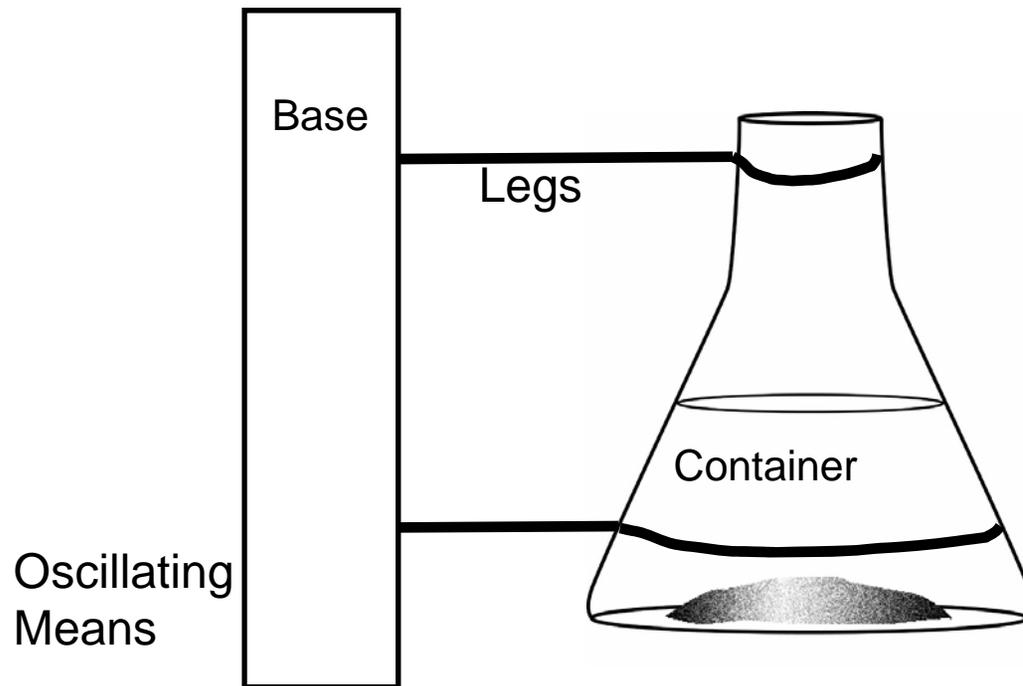
What is a claim?

- Defines a property right
 1. Apparatus for shaking articles, the apparatus comprising:
 - (a) a container for the articles;
 - (b) a base;
 - (c) a plurality of parallel legs, each leg being connected at one end to the container and at the other end to the base to support the container for oscillating movement with respect to the base; and
 - (d) means for oscillating the container on the legs to shake the articles.

Diagram of the Claim



Another Diagram of the Claim



Substantive Legal Requirements

35 USC §101 – Utility, Statutory Subject Matter

35 USC §112 (a) – Enablement, written description, and best mode

35 USC §112 (b) – Definiteness

Substantive Legal Requirements

- 35 U.S.C. §112 (b)
 - “Definiteness” requirement
 - Claims evaluated in light of
 - Content of the application
 - Prior art
 - Interpretation given by those of ordinary skill
- “Special” terms
 - Define in the specification/ be your own lexicographer
- **35 U.S.C. §102**
 - Novel
- **35 U.S.C. §103**
 - Nonobvious

Parts of an Application

- Title
- Abstract
- Drawings
- Background of the Invention
- Summary of the Disclosure
- Brief Description of the Drawings
- Detailed Description of the Invention
- **Claims**

Drafting Ideas – Tell the Story of the Invention

- Patent application is a means to communicate and persuade
- The cast of characters
 - The prior art
 - Likely users of the technology
 - The inventor(s)

The Story of the Invention

- Set the stage
 - **Background of the invention**
 - Unfulfilled need
 - Failures of others
 - Problems with prior art
 - Serious nature of problem
 - But ... “what you say may be used against you”
 - This is prior art and can be used as such by the examiner as such during prosecution

The Story of the Invention

- The inventor saves the day
- **Summary of the invention**
 - Tie to Background (problem/solution)
 - Broad characterization of benefits (e.g., functional)
 - Recast independent claims – Support for claimed invention
- **Detailed description**
 - Refer to advantages of the described features

Application Drafting – Define “Special” Claim Terms

- Avoid 35 USC §112(b) issues
 - claims must set forth the subject matter that applicants regard as their invention; and
 - claims must particularly point out and distinctly define the metes and bounds of the subject matter that will be protected by the patent grant.
 - Why is this important even in a Provisional?
- Be explicit (“As used herein, term X means Y”)
- Claim interpretation
 - Applicant’s definition controls
 - Choose your words wisely

Application Drafting – Avoid narrow characterizations

- Overly narrow characterizations of what constitutes the invention can be used to limit the scope of patented claims:
 - “this invention relates to ...”, “a ... made pursuant to the teachings of the present invention”
 - coupled with a lack of description of alternative embodiments
- Solutions –
 - Use alternative language such as: “certain embodiments of the present invention include, but are not limited to . . .”
 - Describe as many alternative features and embodiments as possible

Application Drafting – Avoid Dedication to the Public

- Problem – Disclosed but unclaimed subject matter is “dedicated to the public”
- Solution – Draft a comprehensive set of claims (only **needed** for non-provisional application)

Application Drafting – Duty to Disclose

- 37 C.F.R. §1.56 -Duty of candor and good faith
- Misrepresentations, misleading statements, and omissions violate this duty.
- **Disclose relevant prior art**

Provisional Applications

- 35 U.S.C. §111(b)
- Act as a “placeholder”
 - Never substantively examined
 - Automatically lapse one year from the filing date
 - Must file a non-provisional within the year to get priority date
- Once filed, applicants can use “patent pending”
- Can not claim priority from another application
- Patent term measured from filing date of subsequent **non-provisional** application

Provisional Applications

Filing Date Requirements

Required

- A specification
- A drawing (if required to understand the invention)
- A cover sheet or cover letter
- Fee

Not Required

- A claim
- An oath or declaration (37 C.F.R. §1.63)
- An IDS

The provisional application must be made in the name(s) of all of the inventor(s). It can be filed up to one year following the date of first sale, offer for sale, public use, or publication of the invention. (These pre-filing disclosures, although protected in the United States, may preclude patenting in foreign countries.)

Provisional Applications – As Basis for Priority

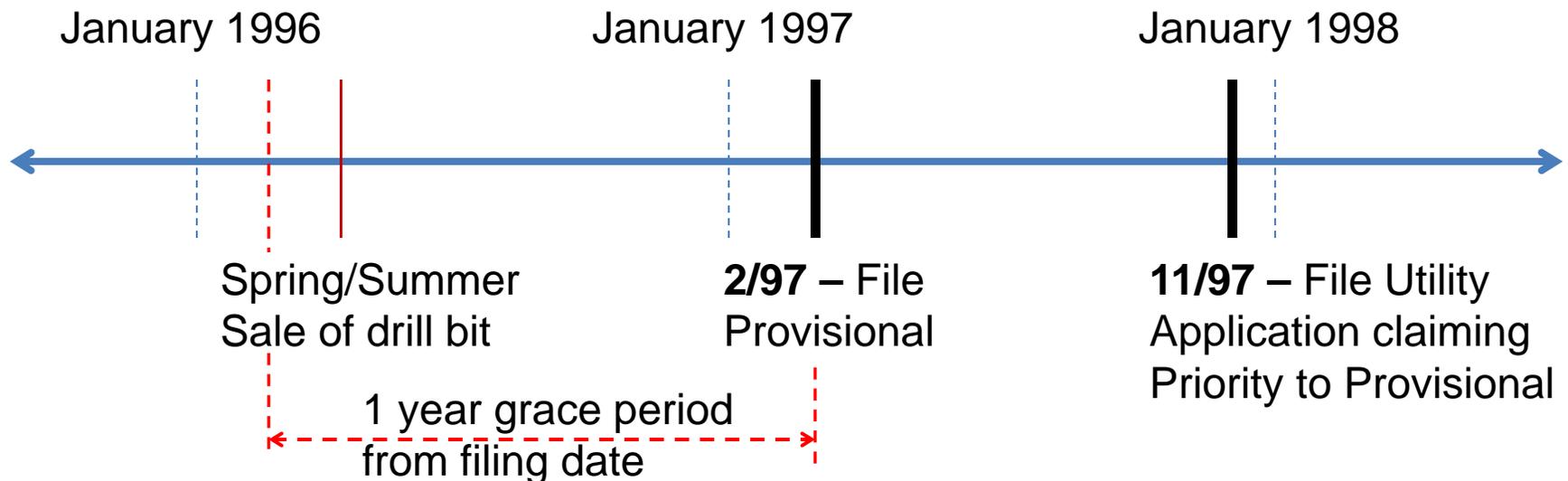
- Domestic Priority
 - For non-provisional applications
- Foreign Priority
 - Foreign Applications can claim benefit of Provisional Application filing date if filed within 12 months of the Provisional filing date under Paris Convention Article 4
 - Patent Cooperation Treaty (PCT) can claim priority to US Provisional Application

Provisional Applications – Domestic Priority

- Requirements
 - Non-provisional application (35 U.S.C. §111(a))
 - Within 12 months of the filing date of the provisional
 - At least one common inventor
 - Reference to the provisional application must be made in non-provisional
 - Provisional application must satisfy **§112(a)** for the invention claimed in the subsequent non-provisional application

Provisional Application – Domestic Priority Example

- New Railhead Manufacturing, LLC v. Vermeer Mfg. Co.,
298 F.3d 1290 (Fed. Cir. 2002)
 - Patent discloses a new drill bit for drilling rock formations



Domestic Priority Example Con't

- Court found disclosure of provisional application did not meet **written description requirement** with respect to subsequently claimed drill bit
- Applicant not entitled to priority back to filing date of provisional application (limited to 11/97 filing date)
- Sales occurred more than one year prior to the 11/97 date, thus patent invalid under 35 U.S.C. §102(b)

Provisional Applications Advantages & Disadvantages

Advantages

- Simple and inexpensive to file
- No declaration, claims or an IDS need
- Specification not examined, and can be informal (PowerPoint presentations, manuals, lab notebook entries, etc.)

Disadvantages

- **Must satisfy requirements of 35 U.S.C. §112(a) with respect to a later-claimed invention in order to provide any benefit of priority**

Provisional Applications Advantages & Disadvantages

Advantages

- Utility application can claim priority to multiple provisional applications
- Multiple provisional applications can be filed in one-year time period measured from earliest-filed provisional application in order to capture changes in rapidly evolving technologies

Disadvantages

- The various claims of later-filed utility application may have different priority dates based on multiple provisional application filing dates, which must be evaluated and considered

Provisional Applications

Advantages & Disadvantages

Advantages

- Patent term of a regular utility patent that claims priority to a provisional application relies on the non-provisional filing date
- Do not have to be in English. Thus, copies of foreign priority documents may be filed as provisional U.S. applications

Disadvantages

- Examination is delayed up to one year
- Content must be evaluated for adequacy of disclosure to support the claim for priority

Conclusion

- Application drafting
 - Patent application as a vehicle to communicate and persuade
 - Substantive and formal legal requirements
 - Tell the story of invention
- Provisional applications
 - Relatively simple and inexpensive
 - Without quality disclosure loss of priority and possible loss of patent rights loom
- USPTO Cover Sheet -
<http://www.uspto.gov/forms/sb0016.pdf>

What is prior art?

- A disclosure (your own, or a third party disclosure) in the public domain that either discloses your claimed invention, or renders it obvious
- Can be, the same as a publication, i.e.:
 - A journal article
 - A meeting abstract
 - A poster or presentation at a meeting
 - A sequence in a database
 - A published patent application or issued patent
 - Use or sale of the invention

Why should you care about prior art?

- To see if any Prior Art related to your invention exists
- Helps determine if you want to file an application
- Helps to determine the appropriate claim scope when drafting claims

Now let's learn to search for prior art...

Search Strategy – From most specific to most general

- Start your search from a known piece of information – a patent number, inventor name, company or university. Look at their inventions that are similar to yours, and the classifications for those inventions
- Search the patent databases using likely keywords or combinations, and examine the resulting ‘hits’ for similarity; then look at the classifications on the most similar patents
- Use the Patent Classification tools – <http://www.uspto.gov/patents/resources/classification/index.jsp>

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- Three Types of Searches at USPTO.gov
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- Two Different Databases to Search
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 - Google - <https://www.google.com/?tbs=pts>
 - Espacenet - http://worldwide.espacenet.com/?locale=en_EP

Patent Classification System

- USPC and CPC
- Schedule creates an organizational framework for patents which allows for easier searching
- Schedule is a road map to determine the best places to search for prior art

Text Search vs. Subclass Search

- Text searching is very useful for some aspects of finding certain information.
- Subclass searching should always be performed because it shows you all relevant structures.

Advantages of Subclass Searching

- Finds related structures
- Do not need to know specific search terms
- Discover elements previously unknown to the Examiner
- Can search via figures (e.g., mechanical features)
- Sometimes difficult to express search needs accurately in textual terms

Both Methods are Important

- Subclass searching is excellent for finding relationships between elements/structures/method steps, and for finding related elements, structures or steps. Also great for showing the advancement of the technology.
- Text searching is excellent for finding specific elements/structures/methods that can be articulated well in a text query.

Quick Search on USPTO Site

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sensor AND "air quality": 2163 patents.

Hits 1 through 50 out of 2163

Next 50 Hits

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Refine Search

sensor AND "air quality"

PAT. NO.	Title
1 8.452.906	Communication protocol system and method for a distributed-architecture heating, ventilation and air conditioning network
2 8.452.532	Selective control of an optional vehicle mode
3 8.452.489	Controlling system for controlling an air handling system
4 8.452.456	System and method of use for a user interface dashboard of a heating, ventilation and air conditioning network
5 8.451.113	Repeater providing data exchange with a medical device for remote patient care and method thereof
6 8.450.716	Resistive memory
7 8.449.824	Sensor instrument system including method for detecting analytes in fluids
8 8.447.463	Tracking vehicle locations in a parking lot for definitive display on a GUI
9 8.446.273	Environmental risk management system and method
10 8.443.800	Method and system of safeguarding a filing process of a breathable air apparatus
11 8.443.667	Temperature-robust MEMS gyroscope with 2-DOF sense-mode addressing the tradeoff between bandwidth and gain
12 RE44.214	Unmanned integrated optical remote emissions sensor (RES) for motor vehicles

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Examples:

ttl/(tennis and (racquet or racket))

isd/1/8/2002 and motorcycle

in/newmar-julie

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ISD	Issue Date	IC	Inventor City
TTL	Title	IS	Inventor State
ABST	Abstract	ICN	Inventor Country
ACLM	Claim(s)	AANM	Applicant Name
SPEC	Description/Specification	AACI	Applicant City
CCL	Current US Classification	AAST	Applicant State
CPC	Current CPC Classification	AACO	Applicant Country
ICL	International Classification	AAAT	Applicant Type
APN	Application Serial Number	LREP	Attorney or Agent
APD	Application Date	AN	Assignee Name
PARN	Parent Case Information	AC	Assignee City
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Atmospheric monitoring

Abstract

Method and arrangement for monitoring an atmosphere includes a *sensor* system arranged to obtain data about the atmosphere at its location and a communications system coupled to the *sensor* system for providing data obtained by the *sensor* system to a monitoring facility, e.g., by wireless transmits, which monitors the atmosphere. A location determining system may be arranged in connection with the *sensor* system for determining the location thereof. The communication system is coupled to the location determining system and transmits the location of the *sensor* system along with the data obtained by the *sensor* system to the remote facility.

Inventors: Breed; David S. (Miami Beach, FL)
Applicant: Name City State Country Type
Breed; David S. Miami Beach FL US
Assignee: Intelligent Technologies International, Inc (Denville, NJ)
Appl. No.: 11/968,736
Filed: January 3, 2008

Related U.S. Patent Documents

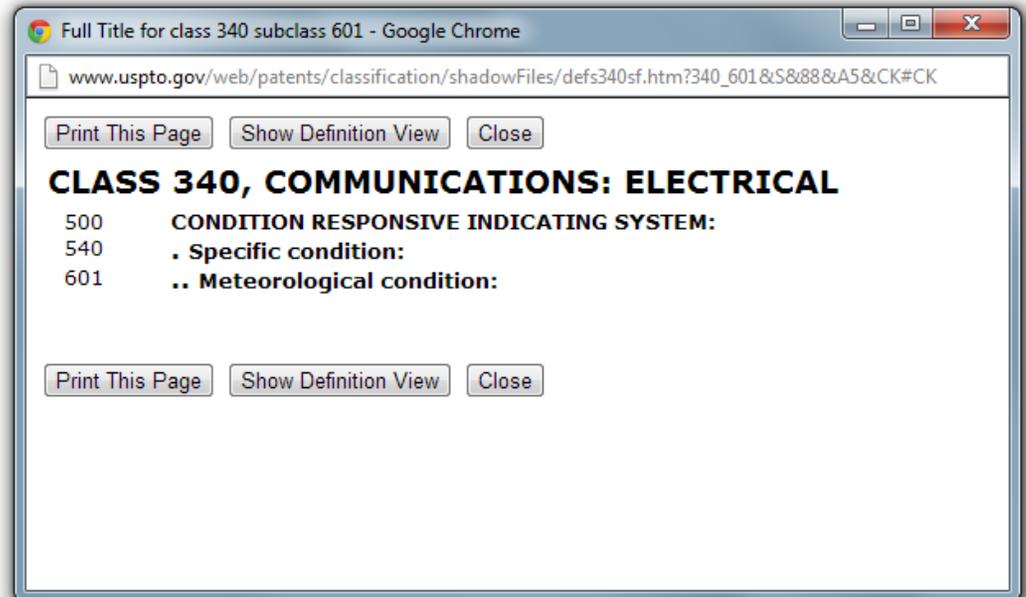
<u>Application Number</u>	<u>Filing Date</u>	<u>Patent Number</u>	<u>Issue Date</u>
10940881	Sep., 2004	7663502	
10457238	Jun., 2003	6919803	
10931288	Aug., 2004	7164117	
11968736			
11278979	Apr., 2006	7386372	
11380574	Apr., 2006	8159338	
10931288	Aug., 2004	7164117	
11968736			
11619863	Jan., 2007		
10931288	Aug., 2004	7164117	
11968736			
11755199	May., 2007	7911324	
11843932	Aug., 2007	8310363	
11865363	Oct., 2007	7819003	
60387792	Jun., 2002		

Current U.S. Class:
Current International Class:
Field of Search:

340/601; 340/581; 340/581; 340/905
G01W 1/00 (20060101); G08G 1/09 (20060101)
340/601,602,626,632,633,7.45,7.48,905,580,581

Patent Classification Schedule

699	.... Bridge circuit
600	.. Radiant energy
601	.. Meteorological condition
602	... Moisture or humidity (e.g., rain)
603	.. Fluent material
604	... Wetness
605	... Leakage
606	... Flow rate
607	.... Filter clogging
608	.... Stoppage
609	.... Counting
610	.... Vane in flow path
611	.... Pressure
612	... Material level
613	.... Weight in container
614	.... Pressure
615	.... Moving sensor (e.g., impeller)
616	.... Overflow
617	.... Pulverant material (e.g., bin)
618	.... Liquid
619	.... Optical sensor
620	.... Electrode probe
621	.... Having sonic sensor
622	.... Having heat sensor
623	.... Float sensor
624	.... Vertically reciprocable
625	.... Pivoted arm
626	... Pressure
627	... Particle suspension in fluid
628	... Smoke
629	.... Ionization
630	.... Photoelectric
631	... Lubricant
632	... Gas
633	... Catalytic detector
634	... Semiconductor detector
635	.. Condition of electrical apparatus



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<input type="button" value="Go"/>	026 Textiles: cloth finishing

Performing a Text Search

- Search Statements:
 - “Air quality” or sensor
 - Search returns 634,000+ patents
 - “Air quality” and sensor
 - Search returns 2163 patents
 - “Air quality” and sensor and pollution and indoor
 - Search returns 131 patents

Performing a Text Search

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- Constantly Evaluate Your Results
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