Inventors' Network Volume 8 New http://inca.hispeed.com

of the Capital Area [INCA] Issue 5 [Was http://inca.interspeed.net]

Meeting is **15 May** 5:30 Networking, 6:30 Presentation - 7:15 Member Issues

Our multiple-licensed inventor, Jerry Porter, spoke in April about "My Kind of 3-Dimensional Inventing". His theory is that inventors are better than most at visualizing. Therefore, we need models to sell our ideas to those who don't visualize as well as we do. His theory is rigorously amplified by M Schrage, in SERIOUS PLAY, a new book from Harvard Business School Press @ $27.50.

Jerry further believes that invention of real innovation is very hard work and characteristically results from sustained preparation. He illustrated with the story about Charles Kettering, "The Professional Amateur". One of Kettering's early invention was an arrangement that held a book open between the handles of a plow. While he and the team were doing necessary agricultural plowing work, he could also read his mental preparation of "homework".

Another of Kettering's strengths was persistence, even after adversity. Kettering had introduced the idea of an electric starter for early automobiles. His hand-made models seemed to work well, but a first production model had led to embarrassment: It had not worked in Detroit. He took a production model onto his sleeper to Dayton. In the sleeper's darkness he felt the surfaces to discover that an electrical part was not appropriately flat, but slightly rounded. Thus, creative examination led the model to communicate with its inventor.

Jerry relates that "Invention is fun", but asks himself, "Why do I invent, but many people seem not to invent?" He proposes that part of the fun (or gift) is an ability to visualize, or see in our mind, what we are thinking about. Nickoli Tesla, inventor of the alternating current (AC) induction motor, wrote of being tormented by unwanted visions in his early life. Then at about seventeen his thoughts turned seriously to invention.

> **"Then I observed to my delight that I could visualize with greatest facility. I needed no models, drawings or experiments. I could picture them all as real in my mind."**
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> **"When I get an idea, I do not rush into actual work. I start building it up in my imagination. I change the construction, make improvements and operate the device in my mind. It is absolutely immaterial to me whether I run my turbine in thought or test it in my shop. I even note if it is out-of-balance. There is no difference, the results are the**

same."

Tesla is perhaps the greatest inventor of all time, and he said that visualization is his greatest strength. Tesla used models extensively, he built them in his mind.

If the greatest did not need to build models -for his own education - why should we? Probably because (1) we cannot visualize as well as Tesla did, and (2) most of us must work with others to get our inventions to market.

> **Tesla, brilliant as he was, had to develop entrepreneuring partners such as George Westinghouse (Manufacturer) and JP Morgan (Financier). [When he arrived in the United States the market for independent inventors was extremely sparse. He worked as common labor after he and Edison came to a disagreement about Direct Current vs Alternating Current.]**
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> **Fortunately, Tesla was willing to invest substantial energies in marketing the marvels of Alternating Current so that his visualization and partnering support could lead to harnessing the power of Niagara Falls to bring light to Buffalo NY - and the rest of the Nation.**

When Carlson of Xerox brought his idea of an optical printer to a General Electric spokesman, he was answered with "Have you thought of using carbon paper?"

Until Frampton Ellis was ready with a working prototype model of his sport shoe, very few individuals seemed ready to understand and further invest in his approach to an innovative design of a better sports shoe. Now that shoe design is internationally famous.

We heard Sam Hicks tell of the evolution of his "Rescue Phone". His police friends kept asking for a more effective phone communication with threateners-of-suicide, hostage-keepers and other mixed-up personalities. Sam kept making models until his potential customers were satisfied.

Jerry explained why he builds models:

1. **The model offers a visual feedback. "It is almost like talking to myself."**
2. **The model brings sufficient focus on the idea so he may discuss it with others.**
3. **His partners and his patent attorney can identify how their strengths will contribute to the project's business success.**
4. **The model is a sales tool. It reveals not only "what it is" but "how it works" and "why I want the item - for my use; -for my product line".**
5. **When he built a model for a product of one of his scientific friends, Dr. Liu came to realize that a model is appropriate even after an invention has been conceived, funded, patented, and built.**
   - **---- With a model to demonstrate, the audience picks up the concepts and the inter-relationship between each design idea.**
   - **"- They truly believe the advantages of the concept since they figured out the advantages on their own."**

Our May 15 Program is Virginia Delegate Joe T. May. Mr. May has a

background that includes being granted 11 patents between 1974 and 2000.
From Sterling, Va., he runs Electronic Instrumentation and Technology Inc, whose products offer feedback process-control data for industrial UV-curing processes.

He also represents his constituents in Virginia's House of Delegates. He is directly linked to the "Highway 66 corridor" as chairman of the Virginia House Science and Technology Committee. He is on good speaking terms with Science and Technology persons in US Congress and most States. His chaired committee sponsored the Uniform Computer Information Transaction Act (UCITA) which is evidence of Virginia's leadership in enacting broad, e-commerce-friendly State legislation.

From our President, Bill Kuntz (202) 638 4988 bandbkuntz@prodigy.net

"INCA is one of the most interesting organizations I have ever had the pleasure of belonging. Why is that? I believe it is because the organization and the members are intent on helping each other as well as enjoying themselves.

My purpose as president will be to foster this environment and challenge each of us to participate. To that end many of you have offered your suggestions on future programs. We appreciate that. But, we need more! Specific recommendations for speakers is most helpful.

Also, we can look at the forums in which the content is delivered. A talk on Monday night is good, but are there other ways which you would find more productive?"

Note: you will have your chance for input at our May 15 [and future] meetings.

WHO IS BILL?

Our INCA President for 2000 is Bill Kuntz, CPA. He is a retired partner from the international accounting and consulting firm of Deloitte & Touche.

As with many of his age-group, his career started in audit and eventually migrated to consulting; his international developmental consulting clients were the US Agency for International Development and the World Bank. He has lived in South Africa and has worked in many of the world's developing countries.

Bill took up the challenge of inventing upon his retirement, starting with [and still working on] a couple of giant ideas developed during his consulting career. After the realization than "smaller was more attainable", he moved to the process of attacking common daily frustrations and opportunities.

He holds four patents with a couple more on the way. Fields covered include sidewalks, ceilings, wrists, and a dish drying rack. The most recent patent covers an accident shield to mitigate gawkers at an accident site.

INVENTOR GETS MONEY

Carol Oldenburg reports that our Palmer Robeson of INCA used a response from an

e-mail by Inventors'Digest/UIAUSA about the WETA show, "Inventing USA". He was the Grand Prize Winner!!!! In addition to a half-day consultation with new product evaluation and licensing guru Larry Udell, Palmer was granted $10,000 to assist in the development and commericalization of his "get-out-of-the-snow" invention. Good Precedent!

The 5th annual USPTO Inventors Conference is now scheduled to be at the University of Maryland Conference Center, 5 - 7 October. Thursday will offer a workshop of basic information for inexperienced inventors. The next two days will feature selected speakers from among many qualified candidates. Fees will probably be about $25 for Thursday and about $100 the rest of the conference. This includes two luncheons and a reception.

Current planning will provide frequent shuttle bus between College Park Metro station and the conference center.

We expect to hear more about his event when John Calvert returns on May 15 to introduce us to Mr Dick Apley, Director, Office of Independent Inventor Programs, and his associate, Cathie Kirik.

Technology and Innovation Seminar, May 23 '00: Free and Open to the Public

THE GEORGE WASHINGTON UNIVERSITY Tuesday, May 23 2000 4:30-6:30 p.m.
Charles F. Larson, President, Industrial Research Institute*
"Basic Research and Innovation in Industry"
Stuart Hall, Room 103 (Commons) 2013 G Street, NW Washington, DC
Please RSVP by reply e-mail at cistp@gwu.edu or by telephone at (202) 994-7292.

***Industrial Research Institute, Inc. (IRI), is a Washington, D.C.-based association of 270 major industrial companies concerned with enhancing the effectiveness of technological innovation in industry.**

Inventive Problem Solving:

From Theory to Practice June 3-4 George Mason University, Vienna Va.
$485 tuition Details, http://www.nciia.org/events/conf00.shtml

Presenters are from George Mason University and DaimlerChrysler Corporation.

43rd Annual Inventors Congress

June 9, 10, 11 Redwood Falls Minnesota

Box 71 Redwood Falls Mn 56283, 1-800-invent1, www.invent1.org

NEW WEB MARKET: **The April issue of Business 2.0 discloses the background of "Patent & License Exchange" "PL-X.com". Its story is available at www.business2.com**

US Department of Energy (DOE) competitive solicitation energy efficiency and renewable energy topics will open in May 2000 and close in July 2000.

Competitive winners are granted financial assistance of up to $40,000 for (category 1) and, up to $200,000 for category 2 applications.

Source: http://www.oit.doe.gov/inventions (202) 586 0984 rolf.butters@ee.doe.gov
Rolf Butters, Industrial Inventions Portfolio Manager, U.S. Dept of Energy

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Technical Entrepreneurs and Intrapreneurs Network: TEIN Events: May 18 & 23
Professor Scott Stern:" Entrepreneurship & The Future U.S. Technology Leadership?"
WWW.TEIN.ORG ADMISSION: $ 40 for both events or $25 for first, and $15 for second
email indications to: tein@starpower.net

"Special Events" with five simultaneous Round Table Discussions (RTs) on first evening 6:30 to 9:30 PM, and two international simultaneous RTs on second evening, 6:00 PM-9:30 PM, in Rosslyn, VA.

brief presentations from Roundtables addressing, on May 18::
(1) WIRELESS/WIRELESS INTERNET:
(2) INTERNET/SOFTWARE:
(3) SPACE & SATELLITE COMMUNICATIONS:

on May 23 ::
(4) INTERNATIONAL/BCNC:
(5) BIOTECH/BIOINFORMATICS:
(6) OPTICAL COMMUNICATION:
**(7) OPPORTUNITIES IN FUEL CELLS
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LOCATION (THURSDAY EVENING EVENT): Corporate Dinning Room, Gannett/USA TODAY Building, 30th floor, 1100 Wilson Blvd, Arlington. Entrance to the Dining Room is through Gannet Security Desk, cross the China Garden and take elevator to the 30th floor.
(TUESDAY EVENING EVENT) is in China Garden Restaurant
By Metro: From Rosslyn Station, exit onto Moore St. Go Right one block, then Left one block on Wilson Blvd. to corner of N. Lynn St.

PARKING: Free Gannett/USA TODAY Building -just past the building entrance on 1100 Wilson Blvd, Rosslyn, Virginia (Phone: 703/525-5317)

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Letter from Craig Rasmussen. We met him on June 12 '99 at the USPTO Sat. Sem.

I met a man who was a little discouraged because he has presented his idea to quite a few companies and all but one, the last one, haven't been able to "see" the advantages.

Many people have a great idea but become discouraged before they can convince someone else about it. I like to look at history and tell others about people who had fantastic ideas but nobody seemed to pay attention.

> **Robert Goddard was a professor at Texas A&M. He tried for twenty years to get the U.S military interested in rockets, but to no avail. At the end of WWII, Werner Von Braun was invited to come to the United States. He had developed the V2 rocket and had almost won the war for Germany with it. When he was asked about his techniques and his research, he was astonished to find that the U.S. Military had never heard of his hero, Robert Goddard or his pioneering work in rocket science.**

INVENTOR'S RECORD MANAGEMENT

Inventorship in the United States is measurable from time of diligently-recorded concept. Most of the rest of the world measures inventorship date from the time of a recorded patent application.

The Manual of Patent Examining Procedures (MPEP) 1706 specifies a service by the USPTO for acceptance and preservation for two years of "Disclosure Documents" as evidence of the date of conception of an invention. The service costs only $10 for 2-year preservation before destruction, and $25 for a requested copy of their disclosure document as filed. This month's page 7 is a copy of a formal cover page or Disclosure Document Deposit Request. Its notice to inventors discusses a duty of "diligence" toward applying for a patent.

The MPEP recognizes other examples of "invention" evidence that has been understood and witnessed by persons and/or notarized. The UIA/USA has provided INCA with a group membership for this year, and offers to their memberships an "IDEA JOURNAL" @$9.95 that appears to meet the criteria for a bound notebook for documenting creation and diligence in recording development of inventive ideas. Address: The United Inventors Association of the USA
P.O. Box 23447, Rochester NY 14692-3447

Creating and supporting new intellectual properties to meet market interests
Creative Problem Solving tools - Part of pre-meeting networking
Washington "Invention Conferences" with major customer groups
Capital Area "Inventor / Business Workshops" to tailor propertiesINCA, Universities and small entity corporations might broaden sound inventor policy. refine a modern Intellectual Property policy for Universities and Corporations
regarding individual inventor equity-rights.

[Consider Duke University Policy as model. Ref: Inventions, Patents and Technology Transfer of July 1 1996, Nine pages]

" **A concept is expressed and refined with concept explanation and value additions.**
Commercialization and directive-focus follow.
Protection strategies for intellectual property considered
Business formation (with a balance of talent) is discussed

Patent values

U.S. Corporations may earn Significant % profit from licensing their patents.

IBM reports $1B/yr from Patent Licensing.

Texas Instruments between 1987&- 1994 collected $1.9B royalties Vs. Operating Income $1.3B
.* Afuah, Allan Strategies to Turn Adversity into Profits Sloan Management Review Winter 1999, p106

Patent policies:
Some University inventors may retain up to half of commercialization benefits.

Some corporations reward inventor team members:
$1,500 at application + $ 750 at assignment, plus $7,500 for every 10th invention.
Average: $3,000 for participation in invention.

Federal research employees may now participate in commercialization royalties of 15% with up to $150,000 per year/patent.

INVENTOR TECHNOLOGY:

-about Claims. Claims are the property within a patent. A candidate licensee will usually examine a patent's claims to determine if this property fits within his business and would add value to the business.
Note: Provisional applications do not include claims.
Their low fee of $75 does not include provision for a USPTO patent examiner's time and judgment. If an inventor expects an application to result in an award of intellectual property, the application must be for a utility, a design, or a plant patent.

-about utility patent's "broad, independent claims":
Convention in writing and in examining claims is to expect the first offered claim to be the most broad.
It lists the minimum component or step means to achieve a solution to a prior-stated problem.
In minimizing the number of components or steps, the breadth of the claim may read on prior art not yet recognized by the inventor or his team. A first office action often challenges claims as being too broad.
The examiner may suggest narrowing the initial claim by adding restrictions cited in dependent claims.
It may mix elements from prior art with new elements.
It will use the most-broad terms for each element.
It will be considered an independent claim because it does not depend on a prior claim.

Clarity in claim-writing will express a claim title prior to use of the usual word "comprising".
Then the component major parts or means are listed (and numbered). The claim is made complete with a "wherein" expressions that link each of the listed components to the other components or means with terms such as "connects to" or "communicates with".

Many writers want to be sure that a reader of their claim will understand "what the aforementioned components and means do" or what functions are to be achieved from the apparatus' and/or method's structural description.

A "whereby" expression may be added to the end of a claim. It may include functional language as a means of enhancing communication, but the whereby expression cannot add structural property to a claim. It merely recites an objective.

About more-specific dependent claims:
One claim-writing strategy would write as broad as possible initial, independent claim, and let a series of claims, each dependent on the first one, further define specifics relating to a component or means of the first claim. Examiners may call these specifics a limitation, and explain that the independent claim, when read against an earlier patent (prior art)

A dependent second claim might be:
2. a

described claim's disclosure. which is the components of a claim immediately after the introduction that concludes cite limiting aspects of each element that further describe the unique character of each element.
[If the examiner finds prior art that seems to anticipate all elements of a most-broad claim, further definition is simple by combining supportive claims into the language of the most-broad one.]

-about narrow, dependent claims:
Supporting broader claims with multiple narrower claims strengthens specificity of the invention.

-about multiple sketches, with defined parts:

-about background

-about best embodiment

Should the examiner cite prior art that seems to covers the most broad claim, a substitute claim (with its own new number) can be expressed from combined elements within the dependent claims or from within drawings, specifications and cited references.

Reality in writing and examining claims is that almost anything can be awarded a patent as its definition is narrowed in depth to include greater and greater depth of unique features--- The importance of this condition is that an extremely narrow patent may offer very little property value. Of course, if that narrow product is an item with a new, broad, "faddish" market appeal, even a narrow patent may limit some threat of competition within a narrow market.

A format for claims will include a name for the claim, a list of elements such as items, methods, or steps, and how these elements cooperatively interact with one another to provide a working whole.

Conclusion: Claims for a breakthrough technology or a new use for a known product can be very broad, with few dependent claims. Licensees may be the ones who add their proprietary style to their products through multiple dependent claims.
Conversely, a claim set for mature technology tends to be narrow, with many dependent claims.

[A viable broad claim is usually much more valuable than a lot of narrow ones.]

Integrating Patents

Patent prosecution requires t-i-m-e: Patent lifetime = 20 yrs from application

"Invention Processes"

1. Assess Needs of Customer

2. Commit Resources to Intellectual Property

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4. Prosecute Patent(s) Reward Inventor

5. License - Up to 20 years

Prosecution of patents is now better organized:
Electronic Search
CD-ROM in 83 US depository libraries, Web-sites (www.USPTO.GOV)

Examiners offer claim-writing for "pro-se" inventors.

SMALL BUSINESS Min. Cost/Patent

Approximately 1/4 American applicants fit "small business" category:
Their fees are half of rate for large corporations.

USPTO fees for "small entity", Dec 1999, become:

Application Filing:	**$380**
Utility Issue	**605**
Maintenance @ 3.5 yr	**$ 470**
@ 7.5	**950**
@ll.5	**1,455**
Anticipated Fee for Patent Life:	**$3860**

Plus hired talent & lots of personal hours.

BIG BUSINESS Typical Cost/Patent

Ave corporate costs per issued patent estimated to be $20,000.
Includes: Salary costs of the inventors,
Overhead and direct costs of supervisors and patent related staff persons:
invention screening committee
corporate (and contracted) patent counsel, testing and drawing services +

USPTO fees at full rate plus the pre-licensing awards to inventors.

Internet comments assessed average asset value of a completed corporate patent to be approximately $200,000 at time of issue.

CONCLUSIONS:

Inventives create Wealth
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Wise Managers Distribute Wealth Equitably

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