# Inventors' Network Volume 10

Of the Capital Area [INCA] Issue 6

Website: inca.hispeed.com = **UIA WEBSITE EXCELLENCE AWARD 2001**

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MEETING: 3rd Monday,
**17 June 02**
Potomac Community Center
11315 Falls Rd Potomac Md

5:30 Networking among Inventors
Pizza & Soft drinks, Dutch Treat

6:30 Dennis Van Dusen

7:45 President Bill Kuntz Presides

## Our June 17 Speakers

**Dennis Van Dusen** has been a major link between the INCA "Inventor" community and the MIT Enterprise Forum for the greater capital area. His engineering undergraduate degree is from Massachusetts Institute of Technology (MIT) and his MBA is from the Harvard Graduate School of Business. His work history has combined engineering and business management in major corporations including Texas Instruments; in his own private electronic and computing businesses and in graduate-level academia.

Dennis' learning style seems to include reaching a fundamental understanding of the principles in any of his environments, and then expanding the implications of those principles to amplify their return-on-investment for the purpose at hand.

His special strengths for INCA listeners include (1) extensive personal research in initiating new products;
(2) substantive leadership in starting and operating high technology businesses, and
(3) an openness and willingness to help capable persons help themselves in new business development.

**July 15 Program: Mr Mark Gottlieb** V.P. of DesignTech International will bring us special insights on how Industrial Design is employed within his product-development and manufacturing firm to meet a growing consumer market.

While he was attending the open house for the Industrial Design Society of America (IDSA) last month, he spoke to several of their inventor friends from INCA. He shared his impression that inventors could invent a lot of things, and that a very good use of their time was to determine, early, if their current best idea was likely to be a winner in the marketplace. Even though disappointed with a first-product's market response, a very good inventor will learn from that experience and work up another set of invention-products. The creative answers are demanded for the design and manufacturing for any leadership line-of-products. Profit-making inventors may welcome each opportunity to invent again - and again. www.designtech-intl.com

**August 19 Program: Bryan Ruffner** has spoken briefly in our INCA discussions about the processes for prototype development and refinement; for writing and professionally-proofing pro-se applications and for protecting privacy prior to international applications. He is now ready to share specifics on how his products work and benefit his customers.

Your editor anticipates that Bryan's coaching will be immensely valuable to inventors who want to get the best value from investment of their personal time and money.

Our May program started with a review of making a business (even a newly-developed product) ready for purchase by another business. Mr Gibson (301) 573 6000, and his associate reminded INCA members and their multiple guests of the strengths available from professional negotiators and business planners.

They were particularly candid about their preference for working with firms who had developed and written their own business plans. Even though their firm, Corporate Investment, offers services of writing and editing, the real believability of a written plan by a business principal carries a unique negotiating strength.

One special merit for putting an independent negotiating agent on an inventor's business team is that the agent may have unique capability of creating a "buying / bidding frenzy" among potential owners or Licensees.

Jerry Porter told us about the value of drawing upon trusted professionals to make our products saleable and to help get them sold. He admitted that some of his patents had been written "narrowly" by his team's patent attorney. Yet, his invention to improve a very common kitchen tool, a "turkey baster", included a subtle, small hole that made its more obvious bottom valve really work like he wanted. His first name for the device was fluid separator, for, like a pipette in chemistry lab, the invention let a careful cook separate cooking fluids within a kitchen, SAFELY.

Now, Jerry's Turkey Baster is being sold by Tupperware internationally. It is one of their most highly advertised products. A royalty income, split among Jerry and his business partners is a great deal better than having complete rights to all the royalty income from no licenses.

Jerry shared some important introspection about business teaming:
He reported on a recent book by Holly Menino, FORWARD MOTION : Horses, human, and the Competitive Enterprise Diane Publishing 1996 . Ms Menino was new to horses and discovered a how "connections" develop between horse and rider, particularly within the most competitive environments. When such "connections" occur between man and beast, each seems to appreciate its role and to perform individually important moves and actions that would not be accomplished if solely dependent on "control" by either. She names this relationship "Forward Motion". [A few others may have spoken of it as "horse sense", which this editor did not understand until Jerry's presentation.]

The reason for reviewing a horse book for an inventor's group is that searching for appropriate business partners seems a lot like seeking a horse with Forward Motion. Ideally, those business partners would be able to perform their particular roles in a way that draws the inventor into his best invention mode, and combines the total effort into its full value and profitability.

Memory Jogger:
Thanks to contacts by Roland Staana, 301 424 4212, our Program VP arranged or April program to includ
Mr Renaud Garat, Director of American Sales for Questel*Orbit (Q*O) 703 556 7444

## One outcome of the April meeting was an invitation to INCA members for a free trial worth $100 in offline services by calling 1 800 456-7248.

## INVENTION " PULL" to help in blind-person technology

Eight Inca members, including Nils Erickson, Richard Leshuk and Jerry Porter attended the two-hour briefing for inventors about the blind community and their technology needs at Baltimore's National Federation for the Blind, Technology Center. 1800 Johnson St. Baltimore, MD 21230 http://www.nfb.org

Nils, Richard and Jerry summarized their findings from the tour as well as the recent presentation on Volunteers in Medical Education. There are about 1 million blind people in the US. 15% of them read brail. About 85% of those who read brail are employed. About 800,000 do not read brail and very few of these are employed.

The present link between a computer and brail output is a very expensive ($3500 - 5000), even though it looks like a simple interface. The Baltimore presentation emphasized a current need for a less expensive device for interface between a computer electronics and a person's fingers.

The device that replicates a brail line of "print" is a little more than 20 inches wide, 3/4 inch deep and thicker than it should be, according to our inventor-observers. The interface device's internal mechanisms include 40 sets of 8 very long levers to amplify a piezo crystal's 0.001 inch activated expansion to a finger-sensing lift of 0.040 inch.

A major proportion of the cost problem is a $75 per set x 40 sets [$3000] per interface. Each set has 8 buttons that are 0.020 dia and which lift 0.040 above the surface when activated. Each set of buttons is arranged two-wide and 4 deep within a 0.5 w x 0.75 d surface area.

Richard sketched the standard brail set format on the board.

## PULL also from DOE

May 15, 2002 started the DOE Solicitation for Financial Assistance: DE-PS36-02GO92008 of their Inventions and Innovation (I&I) Program www.oit.doe.gov/inventions

(DOE), Golden Field Office (GO), offers funds for energy-saving technologies in
conceptual (Cat 1) and developmental (Cat 2) stages.
Cat 2 awards are considered when a bench-scale model and/or preliminary investigations are complete. I&I grants for cat 1 range up to $40,000 in achieving the foresaid work in a year or less.
Cat 2 grants range up to $200,000 and a 2-year schedule. Its developmental work is to bring an energy-enhancing technology or process that benefit industry, the environment, and U.S. energy
security. Current funding for awards is estimated to be $1,700,000. Solicitation related documents are located on the IIPS website at http://e-center.doe.gov/. Proposals are due before Aug 11 02.
Comments, questions, or suggestions should be communicated to webmaster.oit@hq.doe.gov.

A new and improved Quick Guide gives users the opportunity to view up-and-coming solicitations and submit proposals on-line in three easy steps:

Step 1: Register Step 2: Log in to IIPS, locate the solicitation, and proposal cover page
Step 3: Attach files and submit proposal

visit http://e-center.doe.gov/ under User Guide for Contractors and then click, Help.
IIPS Help Desk is at 1-800-683-0751 or IIPS_HelpDesk@e-center.doe.gov

Additional information on OITÆs I&I program and solicitations is available from
Lisa Barnett at 202-586-2212 or lisa.barnett@ee.doe.gov

## INVENTORS HELPING INVENTOR VOLUNTEERS:

Bill is still looking for volunteers to answer our growing list of inquiries from all over the world. Volunteers who are multi-lingual are invited to assist in this goodwill activity. Call Bill at 202 638 4988 or e-converse through BANDBKUNTZ@prodigy.net

Newsletter Review: Our website now shows prior newsletters for more than a year. Starting in May, our newsletter was published within the website a few days before it gets delivered by regular (now 37 cent mail).
We invite the active computer readers to work out a way to bring this input to your screens even before you might receive it in the mail. This is one step toward electronic distribution. Our present objective is to let the newsletter be a consistent reminder of the INCA meetings and their anticipated content.

If we have a computer-oriented person who would like to be the volunteer host for distributing e-mail to our e-mail list, Ray can forward the e-copy directly to such a distributor, in further interest of minimizing unnecessary costs. Volunteers are urged to call ray at 703 971 7443.

Excerpts from Inventor's Tips Newsletter #11 advertising "Make Millions From Inventions" Course

Ten Rules for the Inventor/Entrepreneur — to screen ideas
Entry-level path for affordable learning: "If my invention starts and stays simple enough, I can finance and promote it myself, and I can get it produced and distributed at a profit - all by myself".

Experience Rule: "If my invention is to be a licensed item, my licensee will be more convinced of its profit-making capability when it has grown into a commercial product."

Ken Johnson's invitation for subscription suggests that his course will include advice on how to: "Venture a project".

His ten-rules for screening "next ideas":

1. Go With What You Know.
2. Think Up Products for Big Markets.
3. Invent Products That Can Be Patent or Copyright Protected.
4. Create Products that are Physically Small.
5. Design Simple Products that are user-friendly.
6. Develop Products That Offer Repeat Sales.
7. Devise Products with a Low Manufacturing Cost.
8. Keep Your Initial Cash Investment Small.
9. Have Others Do the Manufacturing.
10. Price Your Product to Yield a Good Profit.

To read more about Inventor, advisor and course author, Ken Johnson, go to his website at: www.makemillionsfrominventions.com

Editor's note: Like the other advertisements extracted in this newsletter, INCA has not researched these sites nor does INCA endorse them. If members or readers have occasion to "check them out", please report your findings, good, OK, or bad.
I have adopted ideas from Ken's newsletter number 11 because the visible advice offers interesting links between inventor's habits-of-thought and some types of commercial success. .

PROVISIONALS I was disappointed in seeing a statements in Ken's advertising e-mail about "* -- get a patent for only $75.00". Provisional applications are not patents. Use of provisional applications adds a $75 filing fee in consideration for getting a filing date that can be referenced in a future utility patent application.

Admittedly, the $75 fee and an appropriately complete disclosure offers an entrepreneur a very-limited-time expression of "patent pending".

As I understand conditions surrounding provisional applications, Examiners do not read the $75 provisional application unless a utility patent application with $370 fee is filed with reference to the provisional application. Unless it has a timely reference to include it in the file wrapper of a utility patent application, the provisional application is destroyed. After an examiner has

processed an acceptable utility application, and determined its issuance, an issue fee of $640 is required also by the USPTO before a patent can be awarded to an inventor.

NY Times The Supreme Court and Patents June 3, 2002 Adapted from article By SABRA CHARTRAND

Last week the Supreme Court reversed a lower court ruling about using the doctrine of equivalents in infringement proceedings. It restored the right of patent holders to use the doctrine. Resolution of the "Festo" 13 year-old case seems to have brought comments of pro and con about those extremely few patents that are subject to the infringement process. The rulings and reversals might influence independent inventors to consider the risks in exaggerated broadness of initial claims.

The doctrine of equivalents says a rival cannot circumvent a patent simply by making cosmetic changes to features of an invention. For example, if a patent says an invention is held together with rope, a rival cannot get around it by substituting wire. For more than 100 years the doctrine was a powerful weapon to inventors defending their patents against copycats.

Festo [German-based firm] said SMC [Japan-based firm] had copied its magnetic rodless cylinder invention.

> The federal circuit court has national jurisdiction over patent appeals. It ruled that Festo could not sue SMC because it had amended its patent applications during prosecution.
> "amendments had narrowed the description of the invention."

Reality: Of the 1.2 million patents in force, about a million include amendments.

Characteristically, a first office action rejects parts of the patent application. Rejections can be appealed through a due process. More simply and quickly, an amended description has been the usual response to most rejections.

The appeals court ruling appeared to bar most patent holders from using D/Equivalents when fighting infringement. [Rational business persons do not initiate an infringement suit unless the alleged infringer has very deep pocket$].

"AGAINST" If the appeals ruling were allowed to stand, many patents could not be defended and therefore would be worth less. The high-investment inventor community would have a disincentive to spend money on research and innovation.

"FOR" Major manufacturers with large patent portfolios like I.B.M., Intel, Ford Motor and Eastman Kodak - praised the appeals court ruling because they said it would limit "frivolous" infringement lawsuits.

The Supreme Court acknowledged that millions of patent holders expected the doctrine of equivalents to be available to them, but its ruling introduced a limit to which it would be held in future infringement proceedings.

> Justice Anthony M. Kennedy made it clear that applicants who decided to amend their applications rather than appeal a rejection would face an extra burden of proof in an infringement lawsuit.

"While the patentee has the right to appeal, his decision to forgo an appeal and submit an amended claim is taken as a concession that the invention as patented does not reach as far as the original claim," Justice Kennedy wrote.

> INCA questions: Would anyone expect an amended claim to be more broad than an original claim?
>
> Does the Supreme Court's unanimous expression mean that if written specification can support a better-devised (and broader claim) than originally offered, the amendment process is precluded from adapting such a change?

Serious inventors with properties of likely very-high value will need to build their initial claim set and specifications with powerful claim-advisors.

**The TELEVISION - ARY**

Jerry Porter called and referred Ray to the May 27 New Yorker magazine article on page 112. Here Malcolm Gladwell relates "Big Business and the Myth of the Lone Inventor."

His excellently-told story is about Philo Farnsworth, father of electronic television, and some of his "inventor-like" behavior (and strongly-held beliefs) that, in retrospect, made his life too fraught to be really satisfactory.

He surely started right. He is reported to be drawing the working mechanisms of steam locomotives at age 3. [Steam-lovers will recognize that the workings were visible and the noisy trains were noticed.] By 6 he was aware of Thomas Edison and Alexander Graham Bell, who were his idols.

When 14 he had an inspiration as he looked at parallel furrows of a plowed field. While others saw neatly turned strips of sod and dirt, he visualized how a picture could be communicated electronically. He promptly explained it to his high school science teacher.

> A electronic-sensitive camera scans a scene quickly in parallel horizontal lines, from top to bottom. The electric signal is instantaneously sent (through a transmitter and receiver) to a cathode ray tube that replicates the black and white image along the timed parallel lines to make an instant transfer of the scene.

Farnsworth, at 21, after diligent experimentation , had invented television [1927].

> Gladwell, author of the New Yorker article cites two new books about Farnsworth:
> Schwartz, Evan "The Last Lone Inventor", Harper Collins $24.95
> Stashower, Daniel "The Boy Genius and the Mogul", Broadway $24.95

Farnsworth had combined some then-old technology of photo-conductivity (May and Willoughby Smith, 1872); visual persistence (Maurice LaBlanc, 1880) and electronic image-scanning (Campbell Swinton 1908). Philo designed an "image dissector" that combined a vacuum tube, a lense and the photo-conductive material of Smith, plus an "anode finger" which made Swinton's idea work at scanning an scene-image.

David Sarnoff of RCA wanted to own resources to make television. He hired an unusually well qualified PhD named Zworykin who visited Farnsworth's laboratory, and later invented a camera that worked under slightly different principles. Zworykin was particularly well funded and staffed within RCA, and seemed to be "only half-step-behind" Farnsworth in the extended development of a working television system.

When RCA was developing Zworykin's camera, they performed a comprehensive world patent search. They found very similar patent applications from Hungary, Canada, Japan, England and Russia. Television had captured the design initiative of many inventors and laboratories. These inventors and inventor organizations were reading patent applications and making new technical contributions to this complex technology.

Farnsworth had been so excited about his insight that he dropped out of college, and convinced two investors to help him pursue his dream. The business model that he selected was the well-publicized model of King Gillette, inventor/developer of the Safety Razor.

> Gillette had been a bottle-cap salesman who, reportedly, had a flash-of-genius about
> (1) how to make inexpensive razor blades and (2) how to market with a high unit-price profit on replaceable blades by offering a free blade-holding razor frame. [This razor's life-enhancing customer-experience was elimination of a daily razor-sharpening process.] His product was delightfully simple. His market strategy was simple, obvious and effective. He got rich quickly.
>
> > In retrospect, Farnsworth seems to have underappreciated the technical challenges of the full television development, even though he owned the fundamental patents for making it work.

Farnsworth was sufficiently gifted to believe that it was OK for him to do personally the many things that must be done in developmental work. He wanted personal “control” over “his” television.

Grievous problems confronted him, including frivolous patent disputes, insufficient money, investor micro-management, lax internal administration, et al. Apparently, his investors were “over-their-head” in attempting to enter the high technology field of television. His biographers attribute his “winning skills and understandings” as **invention**. They also recognize his “losing-skills and understandings”“ that included (1) how to “play politics” [communicate with powers-that-be]; (2) how to raise money; (3) how to run a business or (4) how to organize his life.

Farnsworth was so well accepted as an inventor that both RCA and GE laboratories offered him employment “to invent”. Their standard employment condition of assigning rights to new patents to the employer precluded his goal of “controlling” all benefits from his future work.

In 1939 RCA came to terms with Farnsworth. He got $1million for rights to his main patents plus royalties on all television sets sold. [In terms of comparative valuation, in 1939 entry-level engineers and senior craftsmen were earning $1200 per year.]

Tragically, Farnsworth’s self-image for success seemed to be some sort of romantic Horatio Alger hero figure who, alone, could conquer high technology. However, his television-manufacturing company could not compete successfully with RCA. His patents matured. His independent approach at solving nuclear fusion consumed all his present and future assets. His King Gillette business model was the wrong model for the new electronic technology.

Our January 02 speaker, Mr Jim Laughlin, spoke to the topic of "The Lonely Inventor". His advice to INCA inventors was like that of Jerry Porter and others:

> Inventors usually need to figure out how they can specialize in their own best field: inventing.
> They will have much more time for doing what they do well as they become successful in finding trusted associates who are very good at the wide range of things that the whole successful business must master.

The Minnesota Inventors' Congress (www.invent1.org) is scheduled for June 14 - 16. It's a great show with great people! So, if you have an invention or new product that you want to exhibit, Let the world know about it at the MIC. Tel: 1-800-INVENT-1 E-mail: mic@invent1.org

A producer on a TV show called "Radical Sabbaticals" is looking for folks who gave up great paying jobs to follow the call of their invention. So, if you quit a job to pursue your invention full time, call Tina Seiler at (818) 755-4800 ext 207 or email her at tseiler@wellergrossman.com

AUGUST IS NATIONAL INVENTORS' MONTH! To date, 4100 libraries have requested display material. Please let your local librarian know that this material is available! www.inventorsdigest.com \links to National Inventors' Month.

If you'd like to sponsor a library, send your donation of $12.25 / library to Academy of Applied Science, 30-31 Union Wharf, Boston, MA 02110. www.inventorsdigest.com

Paul Niemann writes for inventor’s Digest (June 02, p32 &33) He also offers www.marketlaunchers.com 800 337 5758
Successful Inventors tend to know details such as:

* How much will the product cost to manufacture?
* Who are the companies most likely to be interested in the product?
* How many units of the product can the company expect to sell?
* How is the product different or better than similar products?
* If the product is more expensive than similar products, why is it worth the higher price?
* Is it patentable? Does it even need to be patented?