## **New Product Marketing**

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## Invention Development 101 A Basic Summary of Invention Development from Conception to Marketplace

Authored by Paula Serber, a West Coast associate of Jim Harris in Priceton Products.

Very often when I tell someone what I do, i.e., take inventors' products to the marketplace, I get such an excited reaction I kind of feel like I just plugged them into an 120-volt wall socket. I see their eyes light up as they say, "I have this great idea for a product and I just know it will sell big! Can I sell my idea?"

A great idea is a good start, but that is all it is -- a start. Many people are under the impression they can sell an idea if it is really good. It's possible, but not likely. Thinking of the idea is the easy part, and just the beginning of a process.

Inventing a product to the point of commercialization requires, (a) time, (b) money, (c) effort and (d) an incredibly strong desire to see your idea to fruition. You'll need a good supply of tenacity, objectivity and creativity, seemingly endless patience -- not to mention support from your family.

The invention process consists of a series of logical steps, some of which can be done concurrently. A staged development mitigates potential time and money loss by allowing for course changes at any point in the development. This does not mean you might not spend money on a prototype and discover manufacturing costs are too high. What it does mean is you will not discover the cost problem after you have paid an attorney \$4,000 to write a now useless patent application.

Once an idea is conceived and thought to be viable, the idea needs to be developed into a physical form through mockups, working models, and prototypes. There are entire articles written on prototyping and the various purposes of prototypes.

Prototyping is a process within the invention process. Generally the initial prototype, the concept assessment prototype, is a non-functional model to check for size, shape, and other physical qualities related to the use of the device. It can be made of anything that can be shaped -- clay or Legos work

well.

You will build other kinds of prototypes; photography, engineering assessment, production assessment, and presentation, depending on your product and your goal.

During the development of the idea, it is important for the inventor to be documenting the invention. These notes may come in handy and more importantly establish your first-to-invent status. It is advised that you follow the description of proper invention documentation.

For example, use a dedicated glue-bound, page numbered, notebook and sign and date each page. A disinterested (not your significant other or family member) witness who understands the material should also sign and date each page. Should it ever come to a point where, say, a company to which you showed your properly protected idea decided to "borrow" it, you will have convincing evidence you were the original inventor.

One of the most overlooked tasks in the invention process is product evaluation. A product evaluation should be conducted during the early stages of invention development. Why during the early stages? Because you will soon reach a point where everything cost money, sometimes lots of money.

The product evaluation is a very important, yet commonly skipped process. Neglecting to research the viability of a product is one reason only about 3% of patents ever make more money for the inventor than was invested. Inventors spend thousand of dollars getting their product patented only to discover that for whatever reason the product was not viable. They did not evaluate before patenting -- a potentially costly mistake.

There are many elements to consider in a product evaluation. Some of the more obvious points are the window of opportunity for a product, manufacturing costs versus perceived retail price, availability of necessary materials, size of the market, existing products, the fit with existing equipment, and ease of use.

The importance of this step can not be emphasized enough. If, for example, after researching the proposed manner of manufacturing, you discover it would be too expensive to produce based on the anticipated retail price, you can make changes in the design to reduce the cost of manufacturing.

A great deal of money can be saved discovering this fact before funds are spent on a presentation prototype and more money on filing the patent application.

A good place to start your product evaluation is the library -- ask the librarian for assistance. Use the Thomas Register, available at most libraries and on the web at <a href="https://www.thomasregister.com">www.thomasregister.com</a>. This is a listing of U.S. manufacturers. Some companies even include their catalogs in the Register.

One of the best sources of information is a manufacturer rep. A good rep knows a great deal about his/her industry, the products and the players.

Before you go too much further, you will need to see if your idea is original. Is there a patent already existing (called prior art) on your product? There is not much point in developing your idea if there is, at least if your goal is to license your product.

You can do your own preliminary patent search either at one of the Patent Depository Libraries around the U.S., or you can search from your desk, online, at IBM's site at <a href="www.ibm.com/patents">www.ibm.com/patents</a>, or one of the other patent sites. These sites are good places to do a preliminary search Also, a good reference on the why's and how's of the patenting process in the United States is David Pressman's book "Patent It Yourself".

When showing your idea or product to other people you are going to want to protect it. The Non-disclosure Document (NDA) can be used in the beginning while you gather information from engineers, patent attorneys, etc. Most manufacturers will generally not sign an NDA simply because they may be developing products of similar use and design. Signing it may restrict them from developing their own products.

There is a way to protect your product during the development stages and delay the cost of a patent application for up to a year. If your innovation is a medium to low-tech design, a Provisional Patent Application places your product in the "patent pending" status for one year. This process was introduced into law in June of 1995 and enables the small entity to self-file for \$75.

There are certain items the inventor should be aware of if choosing the Provisional Patent Application (PPA) process. First, a formal patent application must be filed within one year. Second, and highly important, is that the abstract that is filed with the PPA must contain ALL the elements of any claims that would later be filed in a formal patent application. Although the PPA is a very informal document, it cannot be amended at the time of formalization. For this reason it should be reviewed by a competent intellectual property attorney to insure the breadth and scope of the abstract and to make certain it contains every essential element that would comprise the claims in the follow-up formal application.

So you think you have a winner. Your demonstration prototype works well. Your product evaluation indicates that the product can be manufactured, distributed and sold for a profit. There is a strong intellectual property position based on the ability to patent. What do you do now?

Well, there are two basic options, (1) start your own venture, or (2) license your product to a manufacturer. Which one is best? The question should be, which one is best for you? This all depends on your situation. If you have a life, and you like that life, you should probably consider licensing your product.

On the other hand, if you have the burning desire to start and run your own business... and you have the support of your family... and you are clear about the risks of running a business... and you have access to funding... then go for it. I would advise any inventor, especially one considering the venture route to read Tom Mosley's book, "Marketing Your Invention". It tells the real story of an inventor's marketing options. No candy coating here.

How do you get your product licensed? You can do the locating of potential licensees and presenting your product on your own. It simply takes time, research, lots of phones calls, and the tenacity to keep going when it seems all of your target manufacturers are saying, "We're not interested".

The most important thing to know when locating potential licensees is to target manufacturers that already have the necessary channel of distribution in place. Then start calling to find the right person to talk to.

It is not necessary, but it does not hurt, to have nice presentation materials like photos, drawings, a simple brochure that describes the product and its benefits. I know of one inventor who, for a presentation to Hewlett-Packard, created a very professional looking 10-page presentation about his large format printing invention in a \f2.pdf\f1 format. It could then be attached to an e-mail and opened in Adobe Reader.

If you prefer, you can have an experienced product marketer market your product. A good, professional product marketer will only take your product if he feels it is marketable. Also, he will not charge an astronomical up-front fee. Remember to use caution when selecting a product marketer. There are many slick operations out there claiming to be companies that will help the inventor.

They help the inventor alright! They help the inventor lose lots of money and time -- and sometimes even his/her invention. These companies -- many are fraudulent -- have been known to charge the inventor \$5,000-\$12,000 for patenting and marketing services and then proceed to do absolutely nothing. Do a quick check on the FTC's website at <a href="www.FTC.gov">www.FTC.gov</a> and perform a global search on the word "invention". There you will find a list of some of the companies to avoid.

My advice is to generally avoid those firms that spend a lot of money on advertising. Good honest product developers do not need to advertise because they are known in the invention industry and get plenty of business through word-of-mouth. Even then, do not be afraid to ask for references.

Inventing can be very rewarding. It takes imagination to create a concept. It takes a burning desire to see a concept through the idea, development and marketing phases. It takes objectivity to look at an idea and know when to push forward and when to quit. It takes tenacity to learn from the failures and then start all over again on the next concept.

A great disparity exists between the person who just talks about their idea

and the inventor who has the determination to see his product to fruition. The person who talks about it usually ends up saying, "I thought of that and never did anything about it". The inventor can hold a product in his hand and say, "This is my product".

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