PRODUCT DEVELOPMENT OPTIONS FOR INDEPENDENT INVENTORS

Do you license, work with an intermediate design firm, or start a company and do it all yourself?

Katherine N. Addison

nce you've come up with an idea that you believe offers advantages over current products and that has potential to generate profit, several avenues emerge to get you there. The objective is: create a sellable product that turns a profit and carves out its own protected niche in the marketplace while limiting your exposure to liabilities.

Reaching your objective depends on several considerations. These include the degree of sophistication of the technology, the anticipated sales volume, the nature of

the relationships and distribution networks in the market, brand loyalty of customers, access to capital, and personal factors such as time restraints. Other threshold considerations are the idea's potential for commercial exploitation and how deeply you want to be involved. With respect to potential, you need to consider whether your idea has isolated utility or could lend itself to development of an entire line of products. Additionally, selling price relative to manufacturing cost is a critical issue inventors seldom consider in the concept phase, yet early



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marketplace insight can inform design decisions that will ultimately save you time and money.

In the early stages, assuming that you have sufficient time, capital, and work ethic, you can move beyond the paper idea phase to build an actual prototype and file a provisional patent application. However, to really move forward after this phase, you need money, access to manufacturing facilities and tools, engineers, patent attorneys, and a network for reaching customers (that is, the Internet, marketing personnel or a sales force, customer data, connections to distribution channels such as retailers, and so on).

If quitting your day job is not desirable, two options are licensing and working with an intermediary design and product development firm. You can begin the licensing process by courting an array of potentially interested companies that have a vested interest in the industry that produces (and that have a preexisting infrastructure for producing) the product you are pitching. Alternatively, you may find it advisable to work with an intermediary design and product development firm if the working prototype does not yet attest to the idea's potential. Design

and development firms can provide guidance while developing intellectual property (IP) assets. A stronger prototype and IP portfolio can demonstrate promise to appeal to licensees later.

However, in some circumstances, it may make sense for you to develop and market a product without engaging other people. This may involve quitting your day job to devote yourself entirely to the project. This option requires an idea broad enough to sustain a company, such as a truly revolutionary invention that disrupts and transforms a market. Or forming a company around a narrower idea may succeed if the market, such as emerging markets in Brazil, China, and other highly populated countries, is large enough. Other factors supporting self-development include availability of significant savings for seed funding, a short timeline until revenue generation based on the nature of the product and the market, and an entrepreneurial spirit, willingness and ability to

work hard, and desire to maintain control.

In some cases, you may find it beneficial to maintain control for a longer period throughout product development. For instance, control might provide you with the ability to grant several nonexclusive licenses at a later date or to differentiate the product for several exclusive licenses. This may provide several revenue streams rather than one. However, first you need to perform a candid analysis regarding whether it is even possible to move forward without bringing in outside money and expertise.

Regardless of how you proceed to bring an idea to market, at some stage you will find it necessary to engage professionals such as contractors, employees, machinists, engineers, doctors or researchers for early experimentation, joint venturers, financiers, potential purchasers, and so on. However, prior to speaking with anybody, you should file at least a provisional patent application representative

of the current design, even if you also use confidentiality agreements. This minimizes risks if a contract is breached and makes it easier to remedy the situation by providing official evidence of your rights and contributions before discussions with others began.

By licensing or working with design and development groups, you can make the risk smaller, but

so too will be any eventual reward. It is important that you have realistic expectations when you approach

and engage intermediaries or potential licensees. For example, familiarity with the average royalty rate in the industry for a particular technology is essential. A benefit that comes with receiving a smaller share is forgoing many time-consuming tasks and potential frustrations inherent in product development. Such tasks include identifying and getting commitments from retailers who will sell the product, complying with regulations that may be necessary to legally market the product, and drafting and filing patent applications or hiring a patent attorney to do so. Many tasks that would be burdensome and time-consuming for you to familiarize yourself with are routine for highly specialized professionals.

Unfortunately, without some of these tasks having been performed, it is difficult to find licensees for provisional patent applications based on rough prototypes unless the product fills a gap in a licensee's portfolio. Your concept or product is going to require significant construction, testing, and incremental adaptation to prove itself. During the product development phase, both generating feedback data and applying the data to make improvements require investment.

If you as inventor and founder do not have sufficient assets available, you are going to need outside investment in

exchange for an interest in the future financial return. Design and development groups can provide this support. However, if your product changes significantly based on input from professionals of the design and development firm, then others involved can possibly become coinventors on future filed patent applications. Contractual language in agreements with these groups can help ensure that you as the original inventor get rights in spinoff products and future patent filings derived from the original concept. Thus, speaking with an attorney at this juncture is critical to protecting your rights as the original inventor.

An attorney can be of assistance whether you are dealing with potential licensees directly or working through design and development agents. For example, an attorney might insist that the "percentage of sales" figure for royalties to the inventor be based on worldwide sales including sales in countries without patents pending. Otherwise, the licensee could sell in other countries where no protection was sought and keep all those foreign royalties without risk of infringement abroad. A patent attorney also might review language to ensure that royalties are based on all future product developments within the scope of the patent even if some novel improvements are made to upgrade the original embodiments. Furthermore, patent attorneys can maximize the value of acceptable licensing arrangements for both sides by suggesting creative options and ensuring that the agreements don't constitute patent misuse.1

For example, when bundles of pending applications and patents with different expiration dates are involved, royalty payments can be structured to go down as patents expire and up as patents issue. If a licensee is willing to pay a certain price but needs a payment plan, the agreement might provide for some payments after expiration of the patent based on sales during the term of the patent.²

Getting a patent attorney involved early is important for several reasons. If you are expecting exclusivity, you must file a patent application. Patent attorneys provide background knowledge to minimize liabilities, including ensuring that contracts are in place and appropriate applications are timely filed to minimize risk while working with others. Also, the fact that the proposed product is not available commercially doesn't mean that no one has tried or patented it. For instance, there could be patents that cover something similar and that were never exploited or were devalued after marketplace failures. Understanding why others failed can help you avoid similar mistakes and can suggest the missing links needed for success. Moreover, an attorney can analyze freedom-to-operate data to minimize the number of licenses, if any, required to legally market the product.

Investment in a professional early on can reduce obstacles and expenses later. Licensors or downstream purchasers are not going to want to step into a patent litigation minefield or to pay excessive amounts for licenses to other patents that impede the ability to exploit the invention. Because downstream investors will undoubtedly perform thorough due diligence reviews, your knowing what might be revealed in an investigation before it starts makes the process less stressful and more fruitful. The ability to respond promptly and intelligently to references uncovered also makes you look savvy, building credibility that you can leverage into better contract terms. Inventors and product developers are advised to consult a patent attorney early for the best protection and to make life easier, putting intellectual property identification, development, and management in the hands of professionals. This should translate to more money (in the form of investment, royalties, product revenues, and so on) for vou later.

Kate Addison is a patent attorney for Wood Phillips. Currently her practice focuses on patent prosecution for emerging companies in the medical device and clean technology industries.

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^{1.} For examples of patent misuse, see Brulotte v. Thys Co., 379 U.S. 29 (1964) and Scheiber v. Dolby Laboratories, Inc., 293 F.3d 1014 (7th Cir. June 17, 2002).

^{2.} See Michael P. Sandonato and Howard D. Shatz, "Will Supreme Court Accept Invitation on Post-Expiration Royalties?" in *New York Law Journal*, Vol. 228, No. 104, Monday, December 2, 2002.