

Inventors Need Patent, Licensing Help

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*Experienced licensing/marketing professionals and patent law of-
fices are a "must" for inventors*

"It is well recognized that a strong patent is much better than a weak patent in strong hands."¹

Patentive rights in addition to being the link between technology and the law are an economic necessity. They are as valuable as an investment in stocks or bonds,² requiring the commitment of resources and involving a degree of risk-taking. Like analogies to stock market investments is the desirability of knowledge sufficient to avoid failure and create conditions favorable for gain.

A gap tends to exist between the needs of creative individuals and what they are able to offer companies. For example, an inventor confronted by a technical problem has to find a solution. He will in most cases have to tackle this task on his own unless his employer or a government agency is persuaded to finance further development including experimentation and equipment.

His next step is protecting his invention. In this he needs help from patent attorneys or engineers in the patent department of his employer. So far, substantial monetary investment has been required and it now becomes critical to obtain a return for this investment, at this crucial juncture it is hard, if not impossible, to find someone to lend a hand providing badly needed support. It is hard examining the causes of this phenomenon.

CASE HISTORIES

Our first case history involves the Swiss Federal Office for Industry, Trade and Labor (SICA). Inventing

to promote inventions, the office set up a number of innovation centers in cities such as NY. Each center was equipped with a patent library and operated under the aegis of the industrial department of the center of its location (IDICR) for additional support. This was intended to include the provision of all other necessities of individual inventors and small firms including the physical facilities of technology or incubator parks similar to those existing in the United States.

The authors had the opportunity to observe at first hand the development of one of these centers, located in NY. In addition to innovative entities this facility included firms offering marketing support. After one year all of the marketers had gone out of business due to bankruptcy or voluntary liquidation. Our investigation yielded the following conclusions. When a company attempts to market intellectual property in a number of industrial fields, it tends to fail to do so if it lacks specialized knowledge of each individual field. Extensive research is required in each industrial field affected in order to determine which innovations the market is prepared to consider, the competitive situation, the realistic odds of succeeding, and other parameters. Such investigations tend to be onerous, time-consuming, and expensive. Who should assume their financial burden? The inventor is generally not able to do so, and the marketing specialists cannot as a rule afford to underwrite expenditures of this magnitude.

One such "generalist" marketing firm in NY had an uncommercializing all innovations in all fields serves as a clear example of this situation. One inventor stated: "I have so far spent \$8,000 merely to

have a market study done and to know which industries might be receptive to my idea. With losses of another \$5,000 expenditure will bring me any nearer to finding a prospective licensee."³ The head of the marketing firm opined: "I envy the position of a patent attorney who has comparable compensation amounts can come up with a tangible product, the patent application and possibly also an interest in the actual patent."⁴ At the same time, three other firms were specialized respectively in plastics manufacturing, conveying equipment and heating technology. This created another problem particular to specialization. If one firm's field became saturated with technology or suffered from cyclical depression, the firm was out of business. In addition, inventors are also subject to trends as reflected by major data bank statistics, such as EURODOC (formerly INFADOC, Versand). When their supply of new ideas ran out, the specialized technology marketing organizations withered.

ATTORNEY-MARKETING LINK

Still another factor makes the marketing of innovative concepts difficult as noted by a number of authors:⁵ the average technician or inventor is not a linguistically genius. He or she may find difficulties with the legal language used in patents. Although most patent attorneys are used to asking their clients whether they agree with certain limitations in their claims, when a patent office finds cause close prior art, many engineers do not understand the consequences such a limitation may entail.

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A specific case within our knowledge involves an inventor who, when discussing the grant of a license under his patent stated it would be of particular interest to electronic manufacturers. He believed his patent applied to an electronic calculator. But the claim had inadvertently been restricted to the use of a slide rule — the only instrument described in the specification. Accordingly, electronic calculators were out of the scope of the claim. Had the attorney had the task of marketing the inventor's idea, he would probably have tried to avoid the stated restriction of the claim.

Another case involves a pharmaceutical manufacturing device, the Topo-Capsule. This is a pivotal and rotatable vacuum tank in which powder particles can be surface treated and/or coated in order to either passivate them or make them inactive or metabolite to the anchoring of subsequent components. The technology is employed in the production of preparations such as effervescent tablets or granules requiring a homogeneous distribution of even minute amounts of active substances.

The inventor initially filed process and apparatus claims via a patent attorney who took into account mainly the inventor's statements. Subsequently, the license marketing firm's attorneys, when talking to the inventor for commercialization, realized that product claims were essential. With these in place the different structure achieved by the various process was the subject of the claims of many different patent sets. This action resulted in the pharmaceutical industry bearing a path in the inventor's direction.

Yet another case concerns a synthetic tough biodegradable coating fluid. The patents on it had been abandoned because the inventor could not find the right way of marketing the product in the metal-working industry. When interest in the technology revived it was no longer patented. Despite these adverse circumstances the matter had a happy ending. The license marketing firm's attorneys determined to the surprise of the inventor that the coating fluid with a

slightly modified formula possessed the desirable property of low foaming and acting as an anti-foaming agent when added in minor quantities to other fluids. This property permitted the filing of a new patent with added fields of use and expanded market.

◆ Development Catalyst ◆

In our next case history the licensee acted as the catalyst in the development of improvements of an intrinsically successful patent on exhaust air purification systems for food service use in business and institutions, e.g. restaurants, hotels, hospitals, retirement homes. The improvements made by the licensee licensee gave rise to a further patent filing. As a result of adding scope to the invention, a U.S. license for the improved system is currently under discussion.

Our last case history is of a bio-waste processing plant and methodology made named MICO (for microbiological conditioning and drying). Originally marketed only for processing battery lever law mowers, it did not catch on due to the relatively low risk of soil population where these mowers are delimitated and spread on crop land. Subsequently, the group marketing the process licensee discovered a wider market in sewage sludge, animal waste and bio-organic waste treatment. The plant design was modified to accommodate three feedstocks and an additional patent was filed. These market-driven innovations led to the construction of a major bio-organic wastes processing plant near Dresden, Germany, which is technically and economically superior to the originally conceived plant.

TECHNOLOGY EVALUATION

Evaluating the potential value of innovations requires specialized skills. The value of new technology ahead of industry concepts may go unrecognized or be undervalued. Conversely, the originality of a new technology may lead to its value being overrated to the extent that feasibility may be disregarded. One of our clients, an engineering firm,

discovered a simple yet seemingly revolutionary method of installing controls for an industrial plant. The controls, however, required a special sealing mechanism, which several years down the road were discovered to be not yet invented and unobtainable. This circumstance made the primary invention worthless.

By contrast, an optical instrument manufacturer discovered a way of combining simple zoom lenses to provide a macro-focusing lens. Since focusing was possible only with a predetermined focal length, the inventor themselves did not estimate the invention very valuable while nevertheless filing a number of patent applications on them.¹ Seven years later it was determined that this method was the only viable construction and the firm collected royalties amounting to several million dollars. One writer, Bruce White, remarks in one of his books: "Considerable knowledge and experience are essential in presenting valuable ideas while discarding wild concepts."²

The economic strength of the owner of intellectual rights also plays a part in the appraisal of new technology and influencing its value. A flourishing firm will tend to be able to sell or license its protective rights for a fair return while an entity in bankruptcy will find it harder to obtain a fair return even for valuable technology. Would-Be grantees frequently use patented concepts without payment by waiting until the motor or trailer no longer pays annual maintenance fees.

A DIFFERENT APPROACH

The circumstances described affect the value of an invention and tend to lead to adverse results for intellectual property owners in U.S. technology paths as well as on our home turf, Switzerland. The core problem as we see it is how to help creative individuals and companies during the most crucial phase of their activities, i.e. the successful commercialization of their intellectual property. An examination of the operation of a few innovation centers that have been successful

in Germany and Austria shows that they have been dependent on subsidies by a government, available only to its nationals. The government compensates for sometimes staggering losses due to erroneous evaluations of innovative ideas ... that may amount up to one-third of a center's budget.

A private Liechtenstein firm² has now been in the innovation marketing business for two decades, illustrating its effectiveness. It attributes its success to its unique structure. First, it works closely with its in-house patent law office, benefiting from the experience of attorneys who in drafting and pur-

suing patent applications keep a close eye on economic factors, valuing the patent to the commercial potential of an invention to a greater extent than is usual in standard patenting procedures. The firm's marketing arm in turn is well served by this interaction. It can influence the drafting and pursuit of patent applications from the start in order to enhance the likelihood of an inventor's economic success. Additionally, the firm supplements its knowledge in a broad spectrum of disciplines by working with a worldwide network of marketing specialists in a variety of technical fields.

CONCLUSIONS

Inventors and innovative companies operate at a high risk in seeking to discover relatively rare opportunities and financial support. As in the case of the Liechtenstein firm, the combination of an experienced license marketing firm and a patent law office with commercial experience can greatly benefit invention clients.

NOTES

1. Philip Hanes, "Patents for Invention," *Macmillan & Co., London*, 1914.
2. "Gesellschaft für Erfindungen und Leistungen (GEL)" (1988), Vol. 198, No. 4, pp. 359-360.
3. Post-Austria Street No. 25/26B.
4. "Erfindungs-Gesellschaft," *Technische Zeitschrift*, 1986.