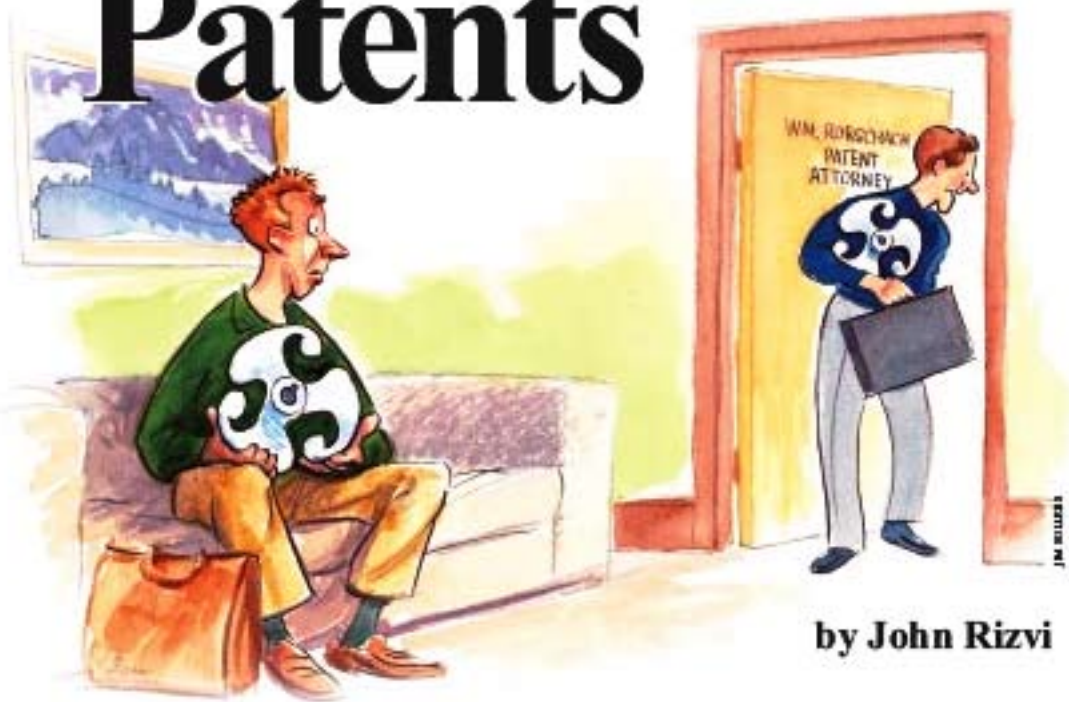
Patents



by John Rizvi

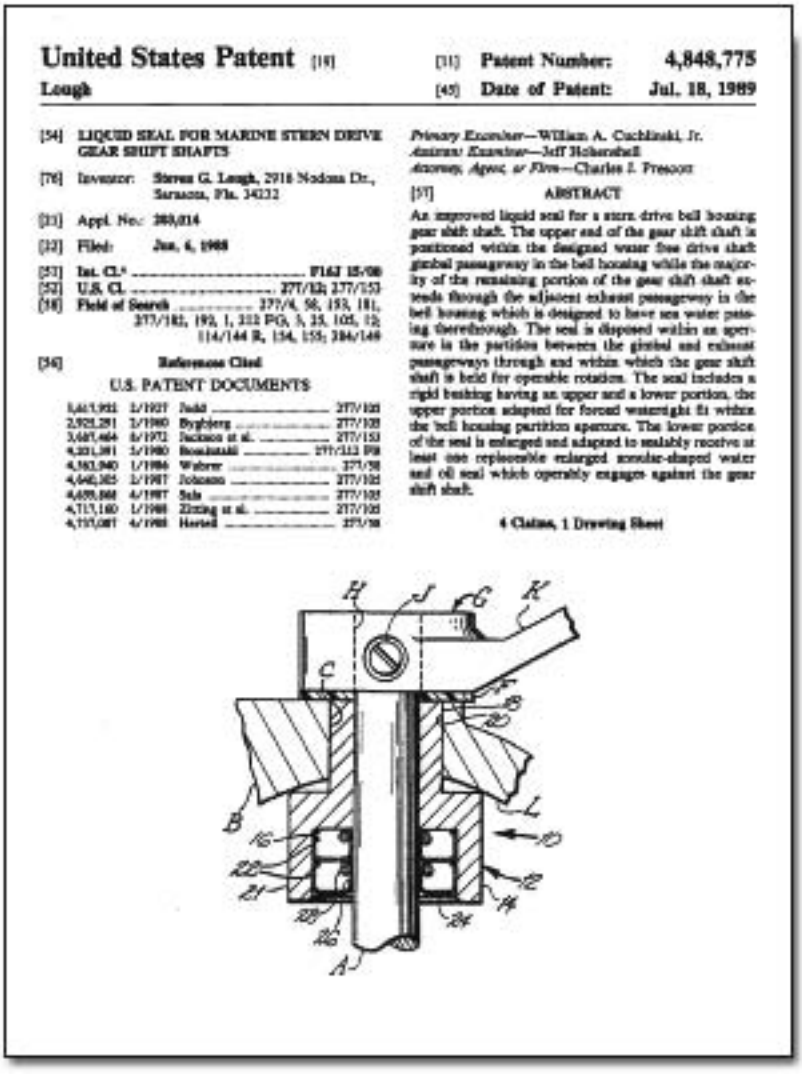
As with all intellectual property in this era of globalization, protecting new marine products and technologies has taken on vastly increased importance. Here's the short version of what you need to know.

Patent lawsuits are routinely filed between companies in the boatbuilding business, be they established firms or new entrants to the marine sector seeking exclusivity in their market niche.

I've received numerous inquiries from boat manufacturers and designers, as well as from component and aftermarket-accessory manufacturers, about how to prevent the theft of their new-product ideas, or duplication of novel manufacturing techniques or business advantages. To deter patent lawsuits and obtain legal protection for your innovation, it's important to know as much as possible about the patent process, the costs involved, the players in your field, and the resources available to you. This article presents an overview of legal protection for newly developed technology and products in the marine industry.

I discuss some of my clients' cases as examples of protected innovation. Individual and corporate identities, as well as other confidential information, have been omitted.

Briefly put, a U.S. patent allows an inventor to exclude others from manufacturing, using, distributing, selling, or importing an invention in the United States without the written



United States Patent [19]
Lough

[11] **Patent Number: 4,848,775**
[45] **Date of Patent: Jul. 18, 1989**

[54] **LIQUID SEAL FOR MARINE STERN DRIVE GEAR SHIFT SHAFTS**

[76] Inventor: **Steven G. Lough**, 2918 Nodosa Dr., Sarasota, Fla. 34232

[21] Appl. No.: 203,014

[22] Filed: Jun. 6, 1988

[51] Int. Cl.[4] F16J 15/00
[52] U.S. Cl. 277/12; 277/153
[58] Field of Search ..... 277/4, 58, 153, 181, 277/182, 192, 1, 212 FG, 3, 35, 105, 12; 114/144 R, 154, 155; 384/148

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Primary Examiner—William A. Cuchlinski, Jr.
Assistant Examiner—Jeff Hohenshell
Attorney, Agent, or Firm—Charles J. Prescott

[57] **ABSTRACT**

An improved liquid seal for a stern drive bell housing gear shift shaft. The upper end of the gear shift shaft is positioned within the designed water free drive shaft gimbal passageway in the bell housing while the majority of the remaining portion of the gear shift shaft extends through the adjacent exhaust passageway in the bell housing which is designed to have sea water passing therethrough. The seal is disposed within an aperture in the partition between the gimbal and exhaust passageways through and within which the gear shift shaft is held for operable rotation. The seal includes a rigid bushing having an upper and a lower portion, the upper portion adapted for forced watertight fit within the bell housing partition aperture. The lower portion of the seal is enlarged and adapted to sealably receive at least one replaceable enlarged annular-shaped water and oil seal which operably engages against the gear shift shaft.

4 Claims, 1 Drawing Sheet

The first page of Steven Lough's patent on a sterndrive seal. Unfortunately, the patent turned out to be invalid because Lough failed to file for it within one year of making his invention public. An appeal by Brunswick Corporation overturned the $1.5 million in lost profits initially awarded Lough by a trial court.

permission of the inventor.

There are two types of patents relevant to the marine trades: *utility* patents and *design* patents. The former protects the function of an invention for 20 years; the latter protects only the overall appearance of an invention and expires after 14 years. These days, a new hull design is often protected with a design patent, but it may also be protected under the Vessel Hull Design Protection Act. One difference between design patent protection, and protection under the vessel hull statute, is that the design patent doesn't require that the actual boat hull be produced *prior to filing*. However, the statute does require that to be protected, the actual hull be produced and publicly exhibited, distributed, or sold. There are additional differences, fairly important ones, but they're beyond the scope of this article.

All patents are required to be filed with the United States Patent and Trademark Office within one year of the date on which the invention was first offered for sale or made public. The terms *offer for sale* and *public disclosure* are interpreted broadly under the law.

The long-fought battle between inventor Steven Lough and Brunswick Corporation over his patented design for a sterndrive seal is instructive and cautionary for any would-be inventor in the marine field. Lough worked as a repairman for a Florida boat dealership and noticed that the upper-seal assembly in the sterndrives often failed due to corrosion. After trial and error at his grandfather's lathe, Lough made six prototypes of a new seal. He installed one in his own boat, gave a second to the owner of the marina where he worked, another to a customer of the marina, and the remaining prototypes to friends. More than a year later, he filed and was granted a U.S. patent on his seal.

Subsequently, Brunswick Corporation designed its own seal assembly based on Lough's solution. Lough sued for patent infringement, and the trial court awarded him $1.5 million in lost profits. Brunswick appealed on grounds that the invention was in public use more than a year prior to the filing of the patent application. The appellate court agreed and invalidated the patent. Had Lough filed for the patent prior to, or within a year of, disclosing his prototypes, his patent would still be valid; and the trial court's judgment in his favor for $1.5 million would have been affirmed. (To view the court record, see *Lough v. Brunswick Corp.*, 86 F.3d 1113, 1121 [Fed. Cir. 1996].)

Disclosure of an unpatented idea is risky. In most foreign countries, patent rights are lost the moment a public disclosure, or offer to sell an invention, is made; there is no one-year grace period. If you disclose your new technology or product at a trade show, you've already lost the right to file for patent protection in many foreign countries, plus the clock

has started ticking on the one-year period in the States.

Recently, I was approached by the manufacturer of a temporary floating work-platform, intended for shipyards. At an international marine trade show, this company had publicly presented its novel production method. Now the manufacturer was interested in filing for patent protection in the United States and internationally, but mistakenly believed it had one year after the presentation to file the initial patent application. Since the grace period is not available internationally, the disclosure at the trade show resulted in the permanent loss of patent rights overseas.

United Sates law strictly adheres to international treaties requiring rigid enforcement of patent filing timelines. Even so, a U.S. patent gives you the right to sue only individuals who produce or sell your product in the United States. In today's highly competitive and international marine market, you may want to consider seeking legal protection *outside the U.S.*

Next, decide whether your technology or product is truly patent-worthy material. Here, there are traps for the unwary. For example, if your idea or concept was developed on your employer's time, with company resources and without its permission, you may not have exclusive rights to the idea.

Last spring, I received a detailed description of an invention from an employee of a well-known marine accessories manufacturer. He was interested in pursuing a patent on the invention on his own, without the company's knowledge. To his delight, there was no employment agreement requiring assignment of inventions to the company.

Unfortunately, not only were the documents and drawings this employee had sent to me prepared on company time and saved on the hard drive at his work computer, he sent the inquiry to me from a company-issued e-mail account, transmitted during normal office hours. These are facts easily "discovered" during litigation and brought up by the company to support its claim to rights to the invention.

Now, I'm not condoning people developing *personal* inventions on company time, but if you're dead set on doing so, then at the very least, bring in your own laptop, use only personal e-mail addresses for correspondence, and have a noncompany cellphone available for making and receiving calls.

Remember that e-mails and telephone calls have date and time stamps; don't communicate by these on company time. In addition, avoid all use of company resources such as computers, fax machines, telephones, other office equipment, manufacturing or industrial equipment, laboratories, tools, and supplies. Something as seemingly insignificant as storing supplies or equipment at company facilities can be problematic.

If you're an employer, you can avoid future disputes over the ownership of new-product ideas by having an employment agreement in place that requires innovations developed during the employment period (and even for a reasonable period afterward) be assigned to the company.

Getting back to the potentially patentable idea, conduct a preliminary patent search early on, to determine if a patent already exists for your idea. No attorney is required in order to search Google's patent database. If your idea survives this preliminary search, then hire a patent attorney to do a thorough professional search and write an opinion on the patentability of your idea before you develop it for production or implementation.

A few years ago, I met with a new boat manufacturer that had developed what it felt was a very unusual hull design. But, instead of coming to me while the design was just on paper, this small company had spent more than $30,000 building a prototype. It was ready for production. Typically, I'll meet with new clients in my office; in this case, the size of the prototype required that I visit the manufacturing facility to view and understand the boat. Two weeks later I explained to the boat manufacturer that I'd found a prior design patent by a large competitor on a substantially similar design.

It's much harder to start over after producing an expensive prototype. Just because a product is not on the market, doesn't mean someone else isn't working on it or hasn't already filed for patent protection on the idea. An attorney's patent search, typically, about $1,500 (more on this below), provides relatively cheap insurance against the expense of retooling or redesign.

If the results of your research indicate your idea or product has not already been patented, then determine who will "buy" your idea or product. It is vital that you thoroughly understand the specific industry niche you're targeting, the companies in it, and the end users or trade customers—*before* you try to patent your product or method.

Likewise, determine whether your innovation can be produced cost-effectively so it will stand a chance of replacing whatever competing product or method is currently on the market. You should also decide if you want to produce the product yourself, or license or sell your idea or product to an existing company.

Having completed this research, you can determine whether you want to apply for patent protection. There are situations where a business will patent a known device, and hold additional patents to protect so-called "improvements" to it. These multiple patents can be cited to leverage negotiations, and often lead to cross-licensing arrangements between competitors.

Entrepreneurs should be cautious about revealing a new product or technology to venture capitalists before securing adequate legal protection. *Make sure that your patent is pending before pursuing any partnerships or investors.*

Trademarks and Copyrights

If you patent your product or technology, consider seeking *trademark* protection for related company names or product brand identities. A trademark is a word, logo, design, or combination of these that identifies a business or its products or services. It will increase in value as the products or services it represents gain brand recognition and customer loyalty. Perform a trademark search, similar to the patent search, before you invest in a logo or other branding.

Once you patent your product and establish a trademark, you should *copyright* any related advertising and marketing material to protect the original expression of ideas, whether literary, artistic, or commercial. A copyright covers original works of authorship: books, sales brochures, advertising, instruction manuals, architectural and engineering drawings,

photographs, paintings, graphic images, Web-site designs, computer software, music, and sound recordings. Copyright protection typically lasts 70 years after the death of the copyrighted work's author.

By the Numbers

To get a concrete sense of the costs to secure intellectual property protection, let's look at the hypothetical invention of a new through-hull fitting.

The first step is for the inventor(s) to conduct preliminary online searches by visiting the U.S. Patent Office's Web site at www.USPTO.gov. This is typically done without incurring any legal fees or costs.

Let's assume the newly developed through-hull fitting still appears to be "unique." An attorney's fees and costs to provide a more thorough patent search, along with a legal opinion on patentability, will run around $1,500.

Next step? File a *utility patent* to protect the improved function of the fitting over existing through-hull fittings. Legal fees and costs for that filing range from $3,000 to $8,000, rising with complexity. If the look of the fitting is important, it may make sense to also file a *design patent* to protect ornamental and nonfunctional components. Fees and costs for filing a design patent application are approximately $1,500 to $2,000.

It may also be advisable to secure *trademark rights* to the product's name and any logos associated with it. Typical fees and costs for a trademark filing run $1,250. Related advertising and marketing material such as sales brochures, instruction manuals, photographs, graphic images, and Web-site designs should be secured by filing a *copyright* application. The government's filing fee is $45, and legal fees range from $225 to $750.

So, the rough, running tally for protecting our through-hull fitting innovation is about $13,500, assuming a minimum of complications.

The potential success of a new marine product line lies in a company's ability to capitalize on the initial innovation. The most valuable assets of a new venture may very well be its patentable product or technology. However, to realize that value, you must transform the rough concept into practical and useful products—and secure legal protection to prevent others from infringing on your chosen market. PBB

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Editor's Note: Professional Boat-Builder *has published a number of articles on different aspects of patent law. For a detailed discussion of both design and trade-dress protection, see PBB Nos. 43 and 44, pages 68 and 13, respectively. For an essay on the Vessel Hull Design Protection Act, see PBB No. 83, page 105. For legal advice on how to counter industrial counterfeiting, especially overseas, see PBB No. 103, page 134.*