

# INVENTION/TECHNOLOGY EVALUATION RESULTS:

With Focus On Assessing License Feasibility of the Product Submitted

# **EVALUATION PERFORMED BY:**

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#### INVENTION/TECHNOLOGY EVALUATION RESULTS

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Invention: Self Leveling Step Ladder with a Universal Hinge Joint Date of Evaluation: November 29 – December 23, 2014

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Thank you for submitting your invention to Lambert & Lambert. All inventions are scrutinized in the same manner and judged by our staff and associates; we seek to evaluate each invention through a rigorous two-phase approach that we have developed.

Below you will find the philosophy and methodology we utilize when we evaluate new products as well as our findings and analysis of your specific invention. It is important to understand both the lens that we look through when considering the viability of your invention and the specific results of our assessment since it will provide you with a comprehensive understanding of the evaluation.

# VALUE PROPOSITION - WHAT PROBLEM DOES IT SOLVE?

The very first question we consider when evaluating a new productor invention is: "What problem does it solve?" In marketing, another way it is phrased is, "What is the product's value proposition?"

A value proposition can be defined as the sum of the total benefits that your product can offer a consumer. Without a clear value proposition a product or technology will not be successfully licensed or commercialized. At its basics a product needs to fulfill a consumer need. Furthermore, the value proposition needs to be clearly defined so that consumers, retailers and potential licensees can readily perceive the benefits. Remember, a consumer makes a decision on product purchases in only a few seconds, so your product must capture the audience and convince them to change their existing spending habits. That is, instead of purchasing Brand A, they should buy New Product B. Benefits, price point, and other factors make up a products value proposition, but if you are unable to define it, you should move on to your next invention.

Once we have identified the value proposition of an invention further research is required. Initially we must ask two important questions prior to moving forward:

- 1. Is the value proposition novel?
- 2. How does the value proposition compare with other solutions available to consumers currently?

To answer these questions, it is now time to research various sources to evaluate the competitive landscape of the market that it will compete in.

# **INDUSTRY RESEARCH**

To begin researching an invention and the industry, there are various sources for gathering critical information. We check product directories, industry catalogues, reference books or on-line. Internet searches online, such as Google and Yahoo are certainly effective when surveying the marketplace to ascertain a product's novelty and the competitive advantages or disadvantages. Actually, it is sometimes surprising how much industry information can be gleaned from these sources.

Aside from online, in-store research is an important step since it gives us a visual understanding of where your product will compete with other products. However, to thoroughly perform in-store research, it is necessary to visit different retail store chains that may carry your product since different store chains often times purchase different products depending on the category. In addition to gathering competitive information, it is helpful to also note the companies providing product in that modular since they could be potential licensees should you choose to go that route further in the commercialization process.

If we find your invention as a product on today's market, it may not be worth your time or investment to continue onto patenting unless you have developed patentable improvements or modifications since licensing will most definitely be a challenge.

# PATENT AND PRIOR ART SEARCHES

Next, we must check to see if the invention that you have conceived has already been patented. Just because we may not have been able to find your product or technology available to consumers or in use, it is still possible that it has been conceived and patented by others in the past. As mentioned earlier, studies suggest that just 2% of patented products are commercially successful. There are numerous reasons why an inventor in the past may not have been able to capitalize on their invention. There could have been various market barriers; lack of consumer demand, competitive inferiority, profitability issues, etc., the listgoes on. Nevertheless, if your product (or something very similar) has already been issued a patent, further consideration is required on whether to proceed by improving it or to abandon the project altogether. No matter the result, a patent search provides an inventor with a tremendous amount of information in their specific field. By doing so, an inventor can educate themselves on their industry and potentially be able to make improvements on the invention.

Even though a patent search is not required by the Patent and Trademark Office to obtain a patent, it is highly recommended and thus the reason we make it an important component in our evaluation. A patent search can uncover many unknown variables such as patentability in comparison to previous art, gathering background information for preparing your patent application, obtaining proof of novel and unobvious requirements and to determine whether your invention would be infringing on any other patents.

To perform an actual search of issued patents, the most convenient way is browse patents utilizing applications on the internet. There are several search tools online, some are free whereas others may have more powerful features and thus warrant monthly usage fees. Some of the more notable online search tools are:

#### DELPHION - FREE FOR BASIC SERVICE OR MONTHLY FEE

http://www.delphion.com

By far the most powerful search tool online since it has numerous added features for the licensing professional. Besides Boolean operators (AND, OR, etc.) for searching, it also can search patents worldwide, create mapping for patent citations, establish the corporate tree on patent assignees and much more.

#### US PATENT AND TRADEMARK OFFICE - FREE

#### http://patft.uspto.gov

The website has both simple and advanced settings for searching. The advanced setting utilizes Boolean operators which improves the quality of search results. A common complaint though is that the patent drawing image viewer is slow and cumbersome.

By typing in keywords that you would use to describe your invention, these sites provide lists of related patents and applications that link to other similar inventions. When we do the research, we note the class and subclass of the inventions that appear to be most similar to your invention and then research the definitions of the subclasses as provided by the Patent Classification System (see <u>w</u>ww.uspto.gov) to find those that we think best describe the class that your invention should fit in. Then we read through all of the inventions in the subclasses that you identify to see if any existing patents are similar to your invention. If we are finding it difficult to identify patents that are similar, we also try to use engineering terminology in keyword searches. It is a rather time-consuming process, but certainly worth the effort since you want to ensure the novelty of the invention that you have just conceived.

# EVALUATING MARKETABILITY, COMMERCIAL FEASIBILITY AND LICENSABILITY

Upon collecting the competitive landscape of an industry and the state of prior art, it is critical to differentiate evaluating marketability versus evaluating licensability.

"Marketability" can be defined as the readiness of a product to be salable. Simply put, will consumers want to buy my product?

FACTORS AFFECTING MARKETABILITY:

- Value proposition considerations: Does the product have more features? Is it more effective at solving the problem, less expensive or more convenient?
- <u>Marketplace con</u>siderations: Is the market for similar products crowded and is it large enough so that the sales volume covers the required investment? Is the timing right?

"Licensability" requires that the product be "marketable" as mentioned above, however it also must have two other criteria – patentability and commercial feasibility (see figure below). If the product is patented or patentable a company interested in licensing the product will be reassured that competitors have a barrier to entering the market – thus offering the licensee added value. This may seem like a subtle difference, however attaining a strong utility patent that is not easily circumvented by competing companies is critical to the successful licensing of a product. Further, the product must be commercially feasible, meaning that it is manufacturable and profitable at a targeted price point that consumers will be willing to purchase it for.



Consequently, a "Licensable Product" occurs at the intersection of these three categories. A product can be patentable and commercially feasible, but if there is no consumer demand or appeal at a certain time it is not marketable and thus fails to hit the mark. If it is commercially feasible and marketable, yet because of prior art there is no patentable subject matter, again, it will fail to be licensed. Finally, if it is patentable and marketable, yet not commercially feasible due to high manufacturing costs or other variable, licensing is extremely unlikely until those barriers are overcome. All three categories must be met; and these categories make up the basis for our evaluation system.

ADDITIONAL FACTORS AFFECTING LICENSABILITY:

- <u>Intellectual property considerations</u>: What is the scope and breadth of your patent claims? Is the innovation critical to your product's specific market segment?
- <u>Financial considerations</u>: Can the product be manufactured with adequate margins and at a retail price that consumers are willing to pay?
- <u>Potential licensee considerations</u>: Are the major players in the industry open to inventions that have been developed outside the company? Do the companies have the ability to develop the product?
- <u>Licensor conside</u>rations: Does the owner of the technology have reasonable expectations on the value of the invention?

#### FINANCIAL - CASHFLOW CONSIDERATIONS OF LICENSING

Licensing is commonly the preferred method in which inventors profit from their inventions. The figure below compares the cash flow curves of licensing an invention versus manufacturing it oneself, which is an important consideration in the evaluation of any product for licensing. As you will notice the "negative cash flow pit" for manufacturing a product is far deeper than that of licensing. This means that the company that licenses the product usually has a much greater investment in the development costs associated with product design, engineering, tooling, packaging, etc. As such, it is important that the product display significant innovation and likelihood of commercial success to warrant such an investment for a licensee.



# CASHFLOW COMPARISON LICENSING VERSUS MANUFACTURING

Most inventors are at various points in the "Idea Generation" or "Development" of their invention, whereas others have completed design, manufactured inventory and have sought to commercialize and initiate sales. The further an inventor takes their invention downstream in terms of development, the further they enter the "cash flow pit" and more valuable their invention becomes. Unfortunately an idea is worth very little, whereas an idea that is fully developed into a saleable product can be extremely valuable!

# KEY EVALUATION CRITERIA OF BOTH EVALUATION SECTIONS

At Lambert & Lambert, we are in search of products or technologies that have notable innovation, provide a superior solution to a common problem, and have a significant potential market. To identify these we have established an evaluation method which researches prior art, provides competitive analysis and rates products on an extensive number of criteria.

In Section I. we provide a detailed analysis of the results of the patent and prior art search. You will find a listing of relevant patents and competing products with links and analysis. Further, at the end of the evaluation, an Appendix is provided which lists the full details of patents that may be same or similar to your invention. The results of the search will also have bearing on the licensability scoring throughout Section II since the patentability and competitive comparison criteria will be directly affected.

In Section II. our evaluation scores your invention utilizing scientific methodology that we have developed keying in on 16 criteria that are critical to successful licensing. Although any evaluation is necessarily subjective, our scoring model seeks to approach all products in the same manner, in which multiple people in our research and marketing departments view your invention and provide their opinions.

Below is a list of our criteria that we judge inventions:

- 1. Invention performance
- 2. Societal Influence
- 3. Legality
- 4. Safety
- 5. Developmental Stage
- 6. Patent
- 7. Invention R&D
- 8. Manufacturing Feasibility

- 9. Profitability
- 10. Demand trend
- 11. Market size
- 12. Product Line Possibility
- 13. Consumer Appeal
- 14. Quantity of Competition
- 15. Quality of Competition
- 16. Licensability

In the next pages we have utilized our methodology that has been described herein to assess the licensing feasibility of your specific invention.

# SECTION I. PATENT AND PRIOR ART SEARCH

#### **RELEVANT PATENTS**

US 355095: Quintin macnider

- US 519535: Jacob koehler and conrad koehler
- US 906892: Hinge-joint.
- \*US 2129401: Flexible utility ladder
- US 2477827: Universal hinge for articulated joints
- US 2890823: Self-levelling ladder
- US 2894670: Self-leveling ladder attachment
- \*US 3037581: Self-levelling ladder
- US 3233702: Self-leveling ladder
- US3527062: Universal joint flexure hinge
- US 4594816: Universal hinge-typejoint
- \*US 4627516: Self-leveling ladder construction
- US 5265698: Self-leveling ladder
- US6595326: Ladder leveling device
- US 6779632: Adjustable leveling stepladder
- \* Denotes that patent is enclosed in the Appendix. Please go to the United State Patent Office web site: <u>www.uspto.gov/patft/index.html</u> to view other patents listed in their entirety.

#### SIMILAR/COMPETING PRODUCTS

\* Note: By hovering your cursor over and then clicking on the internet links given below, you'll open them for viewing in your web browser as will copying and pasting them to your browser address bar.

Product: Flexible ladder Monkey ladder

- <u>http://laddertool.en.alibaba.com/product/1896091455-</u>
  222019606/Flexible ladder Monkey ladder magic ladder.html
- The whole ladder uses black anode treatment, which prevents oxidation, increasing product lifespan and making the entire exterior flat and smooth. Uses multifunctional joint ladder structure, allowing the ladder to be used in different environments and sites

Product: Revolution Ladder - Type 1A

- https://www.littlegiantladder.com/revolution/
- Since it's adjustable, the Revolution can be used safely on stairs, ramps, curbs, docks or other uneven surfaces. The Revolution is made using LiteWave<sup>™</sup> aluminum technology, the very same material used in aerospace construction.

Product: Level Master Automatic Ladder Leveler

- <u>http://www.homedepot.com/p/Werner-Level-Master-Automatic-Ladder-Leveler-PK80-</u> 2/100658394
- This leveler automatically adjusts up to 8-1/2 in. It comes with two ladder levelers, one for each side. Easily attaches to Werner fiberglass and aluminum extension ladders to level ladder on uneven surfaces.

Product: Level-Eze Self Adjusting Ladder Leg Leveler

- http://www.apex
  - unlimited.com/leseadlalegl.html?utm\_source=google\_shopping&utm\_medium=cpc\_adwords& gclid=CMiX-Jyr0sICFShgMgoddj0AqQ
- The Level-Eze Self Adjusting Ladder Leg Leveler fits any width or length of aluminum or fiberglass extension ladder. This quality ladder leveler is made of super heavy duty construction that will not weaken the ladder.

Product: "Ladder Leveler

- <u>http://www.industrialladder.com/product</u>
- Details.do?productID=1071&gclid=COzI15ur0sICFcKPMgodEzQAGQ
- Ideal for using on extension or straight ladders on uneven surfaces. Attaches easily to Type IAA IA I and II fiberglass and aluminum extension or single ladders.

Product: Levelarc Extension Ladders

- http://laddersolutions.co.nz/?product=extension-ladder-level-arc
- Levelarc extension ladders are the only triple extension ladder with fully integrated self levelling; locking and non-slip feet which provide and exceeds BS2037 class 1 standard in one complete package.

#### NOTEOFCLARIFICATION

The research results for "Relevant Patents" and "Similar/Competing Products" listed above may include products or patents that are not identical to the inventor's invention that has been submitted. However, Lambert & Lambert searches products that also compete in the same market segment or seek to offer a solution to the problem being solved by the inventor's invention. Although different, these solutions also present competition for market share and should be considered prior to commercialization efforts or license representation.

#### SCOPEOFSEARCH

For your records, our search was conducted through multiple database searches that access the United States Patent and Trademark Office archive utilizing likely keywords associated with your invention, boolean operators with special attention to the following subject classification areas:

Class 182, subclasses 165, and 201.

In addition, a forward cite and art of record check is conducted on patents that are found to be most similar to your invention, thus exploration in citations and patent references are explored in detail for patents such as U.S. Patent No. 2129401 listed above.

#### **US PATENT LAW BACKGROUND**

The issuance of a patent is mostly governed by 35 U.S.C. §102, which reads in part:

"A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent, or

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States, or..."

Therefore, a patent may not be granted on an invention disclosed more than one year ago in any printed publication such as the patents and products listed and discussed above. However, patent protection can still be obtained on material not disclosed in the subject patents or, more specifically, the differences between the subject invention and the devices disclosed in those patents. It should be noted, however, that those differences must not only be novel or new, they must also not be obvious to one of ordinary skill in the art in order to be protectable by a patent (35 U.S.C. §103). If there are no differences between an invention and the prior art, then protection would not be available.

#### DISCLAIMER

It is important to note that we are not patent attorneys and thus are not seeking to provide a legal opinion of patentability. However, as licensing experts, we utilize these searches to provide a landscape of a particular market segment, which has great bearing on a products eventual success. Without a strong proprietary position (i.e. patent stance), licensing an invention becomes extremely difficult. If you do not have broad enough claims in your utility patent or you only have a design patent, the manufacturer may design around your patent, rather than compensating you for your idea. For such analysis we would like to refer you to Patent Search International out of Washington, D.C. You can find them on the web at <u>www.patentsearchinternational.</u>com. It may be advantageous if you tell the President, Ron Brown, that we referred you.

# SECTION II. LICENSABILITY CRITERIA

#### 1. INVENTION PERFORMANCE

Does the invention perform the task that it claims to do?

- 0 No. Itprobably will not work.
- 1 Yes, but requires substantial changes.
- 3 Yes, but will require substantial changes during development.
- 6 Yes, but may require minor changes during development.
- 7 Yes. It will not require changes.

#### 2. SOCIETAL INFLUENCE

The new invention/idea/product would likely have an influence on society that is...

- 0 Very harmful.
- 0 Moderately harmful.
- 5 Neither harmful nor beneficial.
- 6 Beneficial.
- 7 Very beneficial.

#### 3. LEGAL

The new invention/idea/product will comply with applicable law...

- 0 Under no circumstances.
- 1 With significant modifications.
- 4 With some modifications.
- 6 With minor modifications possibly necessary.
- 7 Without any changes.

#### 4. POSSIBLE HAZARDS

Bearing in mind its possible hazards and side effects, the new invention/idea/product is likely to be...

- 0 Very dangerous.
- 1 Dangerous.
- 4 Moderately safe.
- 6 Safe.
- 7 Very safe.

#### 5. DEVELOPMENTAL STAGE

Submitted information can best be described as...

- 4 A rough idea.
- 5 A descriptive idea.
- 6 An idea with drawings.
- 7 An idea with a prototype.
- 7 Anideareadyformarket.

#### **6. PATENT** (not a legal opinion of patentability)

Bearing in mind the inventions already receiving patents and products on the market that were uncovered in Section I. of this evaluation, the possibility that the invention/idea/product will be granted a patent is likely to be...

- 0 Very low, clearly anticipated by prior art.
- 1 Low, likely to be rejected as obvious.
- 3 Moderate, risk of being rejected or issued with narrow/non-useful claims.
- 6 Very good, likely to pass requirements of novelty and non-obviousness for patent issuance.
- 7 Excellent, non-provisional patent already issued.

# 7. INVENTION R&D

The research and development necessary to achieve a market ready product, in terms of difficulty and expense, is likely to be...

- 0 Very high.
- 1 High
- 3 Moderate.
- 5 Low.
- 6 Very low.

# 8. MANUFACTURING:

Bearing in mind the current technology and what would be needed to manufacture or practice the invention/idea/product, manufacturing or practicing the invention will be...

- 0 Unfeasible now or anytime soon.
- 2 Feasible, but very complicated.
- 4 Feasible, but with major foreseeable difficulties.
- 5 Feasible, but with minor foreseeable difficulties.
- 6 Feasible, without foreseeable difficulties.

# 9. PROFITABILITY:

 $\underline{Are the margins for profitability such that there will be a substantial profit? Projected revenues are likely \\ \underline{to \ be...}$ 

- 0 Very low.
- 1 Low.
- 3 Modest.
- 5 High.
- 7 Very high.

# 10. DEMAND TREND

For products in the category of the invention/idea/product, the market demand seems to be...

- 0 Very low, likely to become outdated.
- 2 Low, decreasing.
- 5 Moderate, stable.
- 6 High, moderately increasing.
- 7 Very high, increasing.

# 11. SIZE OF MARKET

For products in the category of the invention/idea/product, the potential market seems to be...

- 0 Very small, local or specialized market.
- 2 Small, regional or relatively specialized market.
- 4 Medium, multiple regions or moderately specialized market.
- 6 Large, national or broad market.
- 7 Very large, international or very broad market.

# **12. PRODUCT-LINE POSSIBILITY**

The potential for the invention/idea/product to expand into a line of products is...

- 0 Very low, limited to the one product.
- 2 Low, slight modifications possible.
- 4 Moderate, many modifications possible.
- 5 High, numerous products possible.
- 6 Very high, a new market.

## 13. OVERALL CONSUMER APPEAL / DEMAND

 $\frac{Bearing in mind the potential consumers' overall attractiveness to the new invention/idea/product, the demand for the new invention/idea/product is likely to be...}$ 

- 0 Very low.
- 1 Low.
- 3 Moderate.
- 5 High.
- 7 Very high.

#### **14. QUANTITY OF COMPETITION**

Bearing in mind the existing products that the new invention/idea/product will compete with, the barriers to market entry are likely to be...

- 0 Very high, extremely difficult penetration.
- 1 High, difficult penetration.
- 3 Moderate.
- 5 Low, easy market penetration.
- 6 Very low, extremely easy market penetration.

# **15. QUALITY OF COMPETITION**

Bearing in mind the existing products that the new invention/idea/product will compete with (including price, quality, etc.), the invention/idea/product will likely be perceived as...

- 0 Very inferior, extremely difficult to overcome.
- 1 Inferior, difficult to overcome.
- 3 The same. Some advantages and disadvantages.
- 5 Superior, some advantage.
- 6 Very superior, obvious advantage.

#### **16. LICENSING POTENTIAL**

Bearing in mind many of the past 15 questions, the chances that a manufacturer will seek to license the new invention/idea/product is...

- 0 Very low.
- 1 Low.
- 3 Average.
- 5 Good.
- 7 Very good.

We believe that you have a very innovative invention; one that clearly and effectively provides a selfleveling ladder. Furthermore, we are impressed with the ingenuity of your design, most notably your inclusion of a unique hinge apparatus that allows the ladder to flex.

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David Hume December 26, 2014

#### PATENT SEARCH INTERNATIONAL - www.patentsearchinternational.com

\* Get a free trademark search with your patent search when you mention Lambert & Lambert.

Thanks again, and we hope to hear from you in the near future.

Bestregards,

in Lanber

Terry Lambert Partner Lambert&Lambert, Inc.

Tim Sherman Director Lambert&Lambert, Inc.

#### **FINAL NOTICE**

The enclosed evaluation seeks to provide an unbiased opinion on the licensing feasibility of your invention. Whereas Lambert & Lambert, Inc. has sought to develop a scientific approach in the analysis of your invention and provide you with accurate available information, some of the criteria are necessarily subjective and the results may vary from person to person. It is the hope of Lambert & Lambert, Inc. that the enclosed evaluation will be a tool as the inventor considers whether or not to pursue licensing or otherwise commercializing his or her invention. However, the final decision on moving forward with the invention is the inventor's, and Lambert & Lambert, Inc. is not liable for any financial losses resulting from future unsuccessful efforts or apparent losses if the inventor chooses not to move forward and later finds the product on the market. Finally, Lambert & Lambert, Inc. will honor the terms and conditions of the Nondisclosure Agreement signed at the beginning of the evaluation process and thus will not disclose any information that has been provided by the inventor that is not found in the public domain.

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David Hume December 26, 2014