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THE ROLE AND VALUE OF TRADE SECRETS IN IP MANAGEMENT STRATEGIES

I. Introduction

In our knowledge-based high-tech era it is important as a matter of management policy and strategy to exploit the overlap between IP categories, especially between patents and trade secrets, for dual or multiple protection. Patents and trade secrets are not incompatible but dovetail: the former can protect patentable inventions and the latter, the volumes of collateral know-how, resulting in synergistic integration and securing invulnerable exclusivity. Trade secret protection operates without delay and without undue cost against the world. And most technology licenses are hybrid licenses covering patents and trade secrets, inasmuch as licenses under patents without access to collateral know-how are insufficient for commercial use of patented technology.

II. Integration of IPRs

Literature and presentations on IP strategies, IP valuation and other IP topics that I have read and heard almost always speak to patents and patent portfolios. However, doing so overlooks the fact that legal protection of innovation of any kind, especially in high-tech fields, requires the use of more than one IP category, i.e. dual or multiple protection.

Professor Jay Dratler in his *Intellectual Property Law: Commercial, Creative, and Industrial Property* (1991), was the first one to "tie all the fields of IP together." According to him, from former fragmentation by specialties, IPRs are now a "seamless web," due to progress in technology and commerce.

And in 1997 the authors of *Intellectual Property in the New Technological Age* also "avoid the fragmented coverage…by approaching IP as a unified whole" and concentrate on the "interaction between different types of IPRs."

Thus we now have a unified theory in the IP world, a single field of law with subsets and significant overlap between IP fields. Several IPRs are available for the same IP or different aspects of the same IP. Not taking advantage of the overlap misses opportunities or, worse, amounts to "malpractice," per Professor Dratler.

Especially for high-tech products, trademarks and copyrights can supplement patents, trade secrets and mask works for the products' technological content. One IP category, often patents, may be the center of gravity and more important than others. Other IPR categories are then supplementary but very valuable to cover additional subject matter, strengthen exclusivity, invoke additional remedies in

litigation, standup if a primary IPR becomes invalid and thus provide synergy and optimize legal protection.

The most important IP management policy and strategy is exploiting the overlap between patents and trade secrets.

III. Importance of Trade Secrets

Deep–seated misconceptions about the relationship between patents and trade secrets are very prevalent. Trade secrets are treated as the orphan in the IP family, or the black sheep in the IP barnyard. They are maligned as flying in the face of the patent system, the essence of which is disclosure of inventions to the public. Keeping inventions secret is, therefore, supposed to be reprehensible. After I gave a talk on the patent and trade secret interface in a South American capital, the local Commissioner of patents testily commented that it was preposterous to talk up trade secrets and outright absurd to speak of complementariness of patents and trade secrets, because "trade secrets don't need protection because they are secret." (What naiveté? What sophistry?) And one noted IP professor in Washington went even so far as to say: "Trade secrets are the cesspool of the patent system."

Nothing could be further from the truth. Trade secrets are the "crown jewels" of corporations. "Trade secrets are the IP of the new millennium and can no longer be treated as a stepchild," per Mark Halligan. Indeed, trade secrets are now gaining greater reverence as a tool for protection of innovation. And the stakes are getting higher. Injunctions have become a greater threat in trade secret misappropriation cases and damage awards have been in the hundreds of millions in recent years. For instance, in a trial in Orlando, in which two businessmen were seeking $1.4 billion in damages from Walt Disney Co., accusing the company of stealing trade secrets for the sports complex at Walt Disney World, the jury awarded them $240 million. And misappropriation of trade secrets of Pioneer Hi-Bred International on genetic corn seed materials by Cargill, Inc. cost the latter $300 million.

Anent the importance of trade secrets, James Pooley proclaimed recently: "Forget patents, trademarks and copyrights…trade secrets could be your company's most important and valuable assets." It is also interesting to note that Henry Perritt believes that trade secrets are "the oldest form of intellectual property protection" and that "patent law was developed as a way of protecting trade secrets without requiring them to be kept secret and thereby discouraging wider use of useful information." That makes patents a supplement to trade secrets rather than the other way around.

Indeed, according to a 2003 IPO Survey on Strategic IP Management, patents are often not viewed as a panacea but as a side show inasmuch as patents have limits, such as, early publication, invent-around feasibility and patentability requirements but proprietary technology is highly rated as a key source of competitive advantage and the really important intellectual assets are skills and knowledge (88% of responses), which implicates trade secrets. Another finding of this Survey is that while some companies dominate an industry by controlling key patents, others do so by holding important technology as trade secrets.

Moreover, patents are but the tips of icebergs in an ocean of trade secrets. Over 90% of all new technology is covered by trade secrets and over 80% of all license and technology transfer agreements cover proprietary know-how, i.e. trade secrets, or constitute hybrid agreements relating to patents and trade secrets. Bob Sherwood, an international IP consultant, calls trade secrets the "work horse of technology transfer."

Finally, and very importantly, trade secret protection operates without delay and without undue cost against the world, while patents are territorial and so expensive to obtain and maintain that they can be taken out only in selected countries.

IV. The Patent/Trade Secret Interface

Trade secrets are the first line defense: they come before patents, go with patents, and follow patents. As a practical matter, licenses under patents without access to associated or collateral know-how are often not enough for commercial use of the patented technology, because patents rarely disclose the ultimate scaled-up commercial embodiments. Hence, data and know-how are immensely important. In this regard, let me cite the following persuasive comments:

- "In many cases, particularly in chemical technology, the know-how is the most important part of a technology transfer agreement." (Homer Blair, Professor Emeritus of Franklin Pierce Law Center).
- "Acquire not just the patents but the rights to the know-how. Access to experts and records, lab notebooks, and reports on pilot-scale operations, including data on markets and potential users of the technology are crucial." (Robert Ebish, a free lance writer).
- "It is common practice in industry to seek and obtain patents on that part of a technology that is amenable to patent protection, while maintaining related technological data and other information in confidence. Some regard a patent as little more than an advertisement for the sale of accompanying know-how." (Peter Rosenberg, author of "Patent Law Fundamentals").
- In technology licensing "related patent rights generally are mentioned late in the discussion and are perceived to have 'insignificant' value relative to the know-how." (Michael Ward, Honeywell VP Licensing).
- "Trade secrets are a component of almost every technology license…(and) can increase the value of a license up to 3 to 10 times the value of the deal if no trade secrets are involved." (Melvin Jager, former LES and LESI president).

Another very telling case about the criticality of proprietary know-how comes from abroad. Brazil learned a quick and startling lesson when they decided some years ago to translate important patents that issued in developed countries for the benefit of the Brazilian industry. They believed that that was all that was necessary to enable their industries to practice these foreign inventions without paying royalties for licenses. Needless to say, this scheme was an utter failure.

Patents and trade secrets are not mutually exclusive but actually highly complementary and mutually reinforcing; in fact, they dovetail. In this context it should be kept in mind that our Supreme Court has recognized trade secrets as perfectly viable alternatives to patents: "The extension of trade secret protection to clearly patentable inventions does not conflict with the

patent policy of disclosure" (*Kewanee Oil v. Bicron* (1974)) and further strengthened the bases for trade secret reliance in subsequent decisions (*Aronson v. Quick Point Pencil* (1979)) and *Bonito Boats v. Thunder Craft Boats* (1989)). Interestingly, in his concurring opinion in the *Kewanee Oil* decision, Justice Marshall was "persuaded" that "Congress, in enacting the patent laws, intended merely to offer inventors a limited monopoly (*sic*) in exchange for disclosure of their inventions (rather than) to exert pressure on inventors to enter into this exchange by withdrawing any alternative possibility of legal protection for their inventions." Thus, it is clear that patents and trade secrets can not only coexist, but are in harmony rather than in conflict with each other. "(T)rade secret-patent coexistence is well-established, and the two are in harmony because they serve different economic and ethical functions." (Prof. Donald Chisum).

In fact, they are inextricably intertwined, because the bulk of R&D data and results or associated, collateral know-how for any commercially important innovation cannot and need not be included in a patent application but deserves, and requires, protection which trade secrets can provide.

In the past — and even today — if trade secret maintenance was contemplated at all, e.g. for manufacturing process technology, which can be secreted unlike gadgets or machinery, which upon sale can be reverse-engineered, the question always was phrased in the alternative. E.g., titles of articles discussing the matter read "Trade Secret vs. Patent Protection," "To patent or not to patent?" "Trade Secret or Patent?" "To Patent or to Padlock?," etc. Anent this choice, the respective advantages and disadvantages, e.g., in terms of duration and scope of protection, are considered controlling. However, on scrutiny the perceived differences are not there. The patent life may be more or less than twenty years from filing and a garden-variety type of trade secret, far from being indefinite, may last but a few years. Nor is there a difference as regards the scope of protection with "everything under the sun made by man." And while a patent does, and a trade secret does not, protect against independent discovery, a patent leads to efforts to design or invent around and a trade secret, properly guarded and secured, may withstand attempts to crack it.

V. The Patent/Trade Secret Complementariness

I submit that it is not necessary and, in fact, shortsighted to choose one over the other. To me the question is not so much whether to patent or to padlock but rather what to patent and what to keep a trade secret and whether it is best to patent as well as to padlock, i.e. integrate patents and trade secrets for optimal synergistic protection of innovation.

It is true that patents and trade secrets are at polar extremes on the issue of disclosure. Information that is disclosed in a patent is no longer a trade secret. As pointed out above, however, patents and trade secrets are indeed complementary, especially under the following circumstances.

In the critical R&D stage and before any patent applications are filed and also before applications are published and patents issued, trade secret law particularly "dovetails" with patent law (*see Bonito Boats*). Provided an invention has been fully described so as to enable a person skilled in the art to make and use it and the best mode for carrying out the invention, if available, has been disclosed, as is requisite in a patent application, all associated or collateral know-how not divulged can and should be retained as a trade secret. All the massive R&D data,

including data pertaining to better modes developed after filing, whether or not inventive, can and should also be maintained as trade secrets, to the extent some of the data are not disclosed in subsequent separate applications. Complementary patenting and padlocking is tantamount to having the best of both worlds, especially with respect to complex technologies consisting of many patentable inventions and volumes of associated know-how.

VI. The Best Mode Requirement

The conventional wisdom that because of the "best mode" and "enablement" requirements, trade secret protection cannot coexist with patent protection, is a serious misconception. These requirements apply only at the time of filing and only to the knowledge of the inventor(s and only to the claimed invention.

Patent applications are filed early in the R&D stage to get the earliest possible filing or priority date and the patent claims tend to be narrow for distance from prior art. Therefore, the specification normally describes in but a few pages only rudimentary lab experiments or prototypes and the best mode for commercial manufacture and use remains to be developed later. The best mode and the enablement requirements are thus no impediments to maintaining the mountains of collateral know-how developed after filing as trade secrets.

In this regard the recent holding *in CFMT v. Yieldup International* (Fed. Circ. 2003) is highly germane: "Enablement does not require an inventor to meet lofty standards for success in the commercial marketplace. Title 35 does not require that a patent disclosure enable one of ordinary skill in the art to make and use a perfected, commercially viable embodiment absent a claim limitation to that effect…. (T)his court gauges enablement at the date of the filing, not in light of later developments." Such reasoning applies of course equally well to the best mode requirement.

In Peter Rosenberg's opinion, "(p)atents protect only a very small portion of the total technology involved in the commercial exploitation of an invention….Considerable expenditure of time, effort, and capital is necessary to transform an (inventive concept) into a marketable product." In this process, he adds, valuable know-how is generated, which even if inventive and protectable by patents, can be maintained as trade secrets, there being "nothing improper in patenting some inventions and keeping others trade secrets." And Tom Arnold asserted that it is "flat wrong" to assume, as "many courts and even many patent lawyers seem prone" to do, that "because the patent statute requires a best mode disclosure, patents necessarily disclose or preempt all the trade secrets that are useful in the practice of the invention." (*1988 Licensing Law Handbook*).

Gale Peterson also emphasizes that "the patent statute only requires a written description of the *claimed* invention and how to make and use the *claimed* invention." He advises therefore that inasmuch as allowed claims on a patentable system cover

> "usually much less than the entire scope of the system, that the disclosure in the application be limited to that disclosure necessary to 'support' the claims in a § 112 sense, and that every effort be taken to maintain the remainder of the system as a trade secret."

Besides as shown by case law, manufacturing process details, even if available, are not a part of the statutorily required best mode and enablement disclosure of a patent. And it is in this process area where best modes very often lie.

VII. Exemplary Trade Secret Cases

Of course, it goes without saying that technical and commercial information and collateral know-how that can be protected via the trade secret route, cannot include information and know-how, which is generally known, readily ascertainable or constitutes personal skill. But this exclusion still leaves masses of data and tons of know-how which are the grist for trade secrets and often also for additional improvement patents. In this regard GE's industrial diamond process technology comes to mind as an excellent illustration of the synergistic integration of patents and trade secrets to secure invulnerable exclusivity.

The artificial manufacture of diamonds for industrial uses was very big business for GE and GE also had the best proprietary technology for making such diamonds. GE patented much of its technology and some of the patents had already expired, so that much of the technology was in the technical literature and in the public domain. But GE also kept certain distinct inventions and developments secret. The Soviet Union and a Far Eastern country were very interested in obtaining licenses to this technology but GE refused to license anyone. Getting nowhere with GE, the Far Eastern interests resorted to industrial espionage and a trusted fast track star performer at GE, a national of that country, whom nobody would have suspected, was enticed with million dollar payments to spirit away GE's crown jewels. But after a while the GE employee got caught, tried and jailed.

Since 1942 Wyeth has had an exclusive position on Premarin, the big-selling hormone-therapy drug. Their patents on the Premarin manufacturing process (starting with pregnant mares' urine) expired decades ago, but they also have held closely guarded trade secrets. On behalf of Barr Laboratories, which had been trying to come out with a generic Premarin for 15 years, Natural Biologics stole the Wyeth trade secrets. Wyeth sued and prevailed, getting a total injunction, as it was an egregious case of trade secret misappropriation.

These cases illustrate so well the value of trade secrets and, more importantly, the merits of marrying patents with trade secrets. Indeed, these cases show that GE and Wyeth could "have the cake and eat it." Were GE's or Wyeth's policies to rely on trade secrets in this manner or, for that matter, Coca Cola's decision to keep their formula secret rather than to patent it, which could have been done, damnable? Clearly not.

Other recent decisions, such as, *C&F Packing v. IBP and Pizza Hut* (Fed. Cir. 2000) and *Celeritas Technologies v. Rockwell International* (Fed. Cir. 1998) also demonstrate that it is now well established that dual or multiple protection for intellectual property is not only possible but essential to exploit the IP overlap and provide a fall back position.

In the *Pizza Hut* case, for instance, Pizza Hut was made to pay $10.9 million to C&F for misappropriation of trade secrets. After many years of research C&F had developed a process for making and freezing a precooked sausage for pizza toppings which had the characteristics of freshly cooked sausage and surpassed other precooked products in price, appearance and taste.

C&F had obtained a patent on the equipment to make the sausage and also one on the process itself. It continued to improve the process after submitting its patent applications and kept its new developments as trade secrets.

Pizza Hut agreed to buy C&F's precooked sausage on the condition that C&F divulge its process to several other Pizza Hut suppliers, ostensibly to assure that backup suppliers were available to Pizza Hut. In exchange, Pizza Hut promised to purchase a large amount of precooked sausage from C&F. C&F disclosed the process to several Pizza Hut suppliers, entering into confidentiality agreements with them. Subsequently, Pizza Hut's other suppliers learned how to duplicate C&F's results and at that time Pizza Hut told C&F that it would not purchase any more sausage from it without drastic price reductions.

IBP was one of Pizza Hut's largest suppliers of meat products other than sausage. Pizza Hut furnished IBP with a specification and formulation of the sausage toppings and IBP signed a confidentiality agreement with Pizza Hut concerning this information. IBP also hired a former supervisor in C&F's sausage plant as its own production superintendent but fired this employee five months later after it had implemented its sausage making process and Pizza Hut was buying the precooked sausage from IBP.

C&F then brought suit against IBP and Pizza Hut for patent infringement and misappropriation of trade secrets and the court found, 1) on summary judgment that the patents of C&F were invalid because the inventions had been on sale more than one year before the filing date and 2) after trial that C&F possessed valuable and enforceable trade secrets, which were indeed misappropriated.

What a great example of trades secrets serving as a fall back position where the patents fail to provide any protection! Indeed a patent is a slender reed in light of the existence of three dozens of invalidity and unenforceability reasons and many other potential patent attrition factors, such as:

- doubtful patentability due to patent-defeating grounds;
- narrow claims granted by the PTO;
- "only about 5% of a large patent portfolio" having commercial value " (per Emmett Murtha, ex-IBM and former LES president);
- the average effective economic life of a patent being "only about five years" (Emmett Murtha);
- enforcing patents being a daunting and expensive task;
- only very limited or no coverage in existence in foreign countries,

as well as others.

VIII. Conclusion

In conclusion, it bears reiteration that trade secrets are a viable mode of protection in the intellectual property field. They can be used in lieu of patents but, more importantly, they can and should be relied upon at the same time and side by side with patents to protect any given invention as well as the volumes of collateral know-how, because far from being irreconcilable, patents and trade secrets in fact make for a happy marriage as equal partners. Hence, it is patents and (not "or") trade secrets.

With patents and trade secrets it is clearly possible to cover additional subject matter, strengthen exclusivity, invoke different remedies in litigation and have one standup when the other becomes invalid or unenforceable. Exploiting the overlap between patents and trade secrets and utilizing both routes for optimal protection is a most important and practical, profitable and rational IP management strategy.

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