HOW CAN THE CHEMIST HELP THE PATENT LAWYER: HOW CHEMISTS AND CHEMICAL ENGINEERS ASSIST IN PATENT LICENSING ACTIVITIES

By E. V. HAINES Esso Research and Engineering Co., Elizabeth, New Jersey

Whether we are overjoyed by the thought or not, most of us, and regardless of whether we call ourselves chemists or chemical engineers, sooner or later are called upon to aid patent attorneys in licensing, and other contractual, matters relating to patents. Generally, the type of information sought by patent attorneys from chemically-trained individuals falls into two categories -- matters relating to the economics of a process or composition of matter, and matters relating to the technology of compositions of matter or processes.

In the first category, a few generalizations will serve to acquaint you with the nature of the economics which constitute a patent attorney's working facts in order for him to intelligently draft a suitable license agreement involving one or more patent assets, or, in the case of a potential licensee, for the patent attorney to interpret intelligently whether or not the terms offered by a proposed license are reasonable, exorbitant, or, as sometimes may be the case, an outright bargain.

What is the nature of the thing being licensed? What are the yields, purities, raw materials costs, and processing efficiencies of the thing being licensed versus the already-existing or competing processes or compositions? What do the market surveys show - Is the product, costwise, going to be able to compete successfully with established products on the market? It is, of course, a general principle, in the light of modernized thinking, not to charge as a royalty all that the traffic will bear. From a short-range standpoint, a high charge might seem to be a desirable thing. But this only creates a strong incentive not only to the licensee, but to competitors, to spend money, time and effort to develop products or processes which will be superior to the thing patented or at least equal to it, and which will avoid infringement of the patent or patents carrying the proposed high rovalty fees.

It is, therefore, a reasonable attitude for a prospective licensor, as well as the prospective licensee, to know the potential economics of the thing being licensed, placing, as nearly as possible, a value on the improvement or the novelty of the patented art or composition so that each party can judge whether or not he believes that he is receiving a fair share of the dollar savings or other benefits represented by the patented process and/or the product over those old in the art. Of course, at this juncture, such facts and figures are meaningless if they are merely guesses; and the chemical market analyst and

the chemical development engineer, working as a team, must develop dollars-and-cents figures which will be as realistic as it is possible to attain.

From the technical side of the licensing program, chemists and chemical engineers are of profound help in several ways in negotiating the business decisions. The framing of the definition of the field of the agreement or the scope of the agreement can be a critical problem. Such a definition of the field of the agreement often is couched in highly technical terms. This becomes a very important consideration in many license agreements, particularly where there are grantback provisions to the licensor by the licensee. A precise definition free from ambiguity or indefiniteness is always desired. That is what is being licensed with potential improvements being licensed back to the patent holder by his licensee. The drafting of technical language to define the field of agreement where a group of patents is being licensed usually requires careful and detailed consultation with chemists and chemical engineers in order to find the appropriate but precise language necessary to carry out the intent of the parties.

An interpretation of the language of the claims, something in which the chemist alone is able to assist the legal talent, is also necessary in many instances. It is necessary, on occasion, for chemists to conduct bench tests to determine whether or not a license is needed in the first place, and the extent to which such a license must be sought often is determined by the technical facts elicited from the chemist. In other words, technical facts must be determined in order to guide the patent lawyer.

In many cases, know-how and technical proprietary information coextensive with the field of the agreement must be exchanged by the parties to the agreement under the terms of the agreement. What is and what is not proprietary information? This is sometimes reduced to a question of know-how, but, more often than not, confidential proprietary information boils down to that information which is concerned with the subject matter of the license agreement and which is given by one of the parties to the license agreement to the other party. This does not mean, of course, that all such information is confidential merely because the person handing it over may designate it as such. Nevertheless, in the absence of the same information being in the public domain either through printed publications or in patents, it is up to the chemist and the chemical engineer to advise the patent

^{*}Presented before the Division of Chemical Literature, ACS National Meeting, New York, September 12, 1960.

attorney and his client just what they consider to be the essence of the proprietary information which is to be turned over to the licensee. Here, the chemist and chemical engineer are relied upon, almost exclusively, to guide the client and his patent attorney.

The licensor himself may not be too clear in his understanding of just what information he is obligated to furnish the licensee and what information, in turn, the licensee may be obligated to furnish the licensor. The results of pilotplant studies as well as bench-scale studies often are delivered to the licensee by the licensor once the agreement is signed, for the parties are then engaged in a "mutual" undertaking, so to speak. The chemist and the chemical engineer are looked to, to furnish an extremely valuable service in affording clear descriptions and specifications of the process and its design features.

It is not unusual for license agreements to contain performance guarantees by the licensor

to the licensee, and in setting those guarantees the chemical engineer must of necessity advise his principal, the licensor, as to what minima the licensor should be willing to stand on as a guarantee to the licensee. The minima as to yield, cost of product, efficiencies, etc., can only be set with the guidance of the chemist and the chemical engineer.

It will be seen from these few remarks that although there are many ways in which a chemist or chemical engineer can and must under present technological practices advise the patent attorney as to the technical and economic facts involved in any particular patent situation, and although the patent attorney must of necessity pay close attention to that advice, it is the patent attorney, the client, the chemist and chemical engineer working as a team who evolve the best results in a situation where each member of the team fully appreciates and understands the value of his contribution to the common effort of each of the other members of that team.