DATE: April 25, 1989

TO: Tom Field

SUBJECT: Homer Blair speech at Tom Field's conference

As we discussed I am enclosing a copy of my speech. You are welcome to publish it in your journal.

If for some reason you do not, would you please give it to Bob Shaw for his consideration for IDEA?

Homer O. Blair

HOB/Ruh/ENC

#59

THE ROLE OF TECHNOLOGICALLY-TRAINED CORPORATE LAWYERS IN MANAGING RISK

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Introduction

Society knows much more about the environment and dangers to it and ourselves today than we did in the past. Also there are many more laws and regulations today than there were previously. I am sure both our knowledge and our laws and regulations will increase in the future.

Science, Technology and Law

In most organizations, including our legislative and administrative bodies, there is no one who understands both technology and law. Scientists and engineers know little, if anything, about the law and usually do not have any interest in

learning about the law except in the most general terms. In fact most scientists and engineers probably have a low opinion of lawyers and the law. If they know a lawyer it may be on a social basis and that lawyer will probably not understand anything about the technology with which the scientists and engineers are familiar.

In general lawyers usually know little about technology. Most people who become lawyers have no interest in science and technology. If they did they would probably have become engineers or scientists.

Thus we are left in the environmental field, and in a number of other fields, with two bodies of knowledge, each of which is quite complex and each of which usually requires a significant period to reach a level of competence and understanding.

For many subjects it is not particularly difficult for an intelligent person to become reasonably competent in a reasonable time. For example if one wishes to learn about Charles I of England, who ruled from 1625-1649, appropriate references may be

located and studied and after some time that person will become quite expert in the subject.

Also if one wished to learn about the history of Concord, New Hampshire, this could be done in a relatively short period of time.

Unfortunately however technology is quite different. One needs to have a substantial background in mathematics, chemistry, physics, etc. in order to be able to understand much less appreciate advanced environmental chemistry, computer programs, biotechnology, etc.

Also the field of law requires considerable time and background to master the subject matter and understand the interplay between legislatures, courts and executive branches and to be able to locate, read and understand the law. In environmental fields scientists with appropriate technological backgrounds, usually chemistry, must learn to communicate with lawyers and lawyers must learn to communicate with scientists. Obviously this can be done and occasionally is done in an efficient and effective

manner.

People With Both Legal and Technological Training

However this could be done in a more efficient manner by utilizing a small group of people who have the rather unusual combination of education, and frequently experience, in both technology and law. Most of these people are patent lawyers, but there are a significant number of others. While the total number may not be large when compared to the total numbers of lawyers, scientists and engineers, as of March 1, 1988 there are 12,623 persons registered to practice before the U.S. Patent and Trademark Office. The vast majority of these people have both technological and legal educations.

Patent Lawyers - A Unique Breed

At present U.S. law permits a lawyer admitted to practice in any state to practice before any federal agency except one. This is the patent part of the U.S. Patent and Trademark Office which is permitted to, and does, set its own requirements.[1] The U.S. Patent and Trademark Office requires a rather difficult one day examination before a person is permitted to practice in the

patent portion of the U.S. Patent and Trademark Office. However before one may take this examination a person must demonstrate to the U.S. Patent and Trademark Office that they have an appropriate technological degree or equivalent education and experience. The U.S. Patent and Trademark Office is noted for being quite strict in enforcement of this requirement.

I am not aware of any field of law in the U.S. in which there is an educational, experience or examination requirement in addition to a legal education and bar examinations.

As far as I know the U.S. is the only country which requires that a patent professional must be <u>both</u> technologically and legally trained. Some countries have a technological requirement, such as Great Britain, Germany, Japan and the Soviet Union. Others have a legal requirement, such as Mexico, Argentina and Taiwan. Thus U.S. patent lawyers are unique in their requirements.

Thus while there are many skilled lawyers, the vast majority are not qualified to become patent lawyers because they do not have the requisite technological background.

I have found from discussions with many patent lawyers and law students that nearly all those that become patent lawyers do not set out to become lawyers but initially planned on becoming engineers or scientists. At some time, either during their education or during their careers, they decide they do not wish to be full-time scientists or engineers and decide to become lawyers. However they look at the world as technically trained people and still have a strong interest in science and technology.

Often it is not an easy thing for a lawyer who is working on an environmental problem to understand the chemistry involved and various modifications which may be suggested. While the lawyer can talk with the technical people involved after learning some basic information, and get quite a good understanding of the technical problems, it is very difficult for lawyers to ask the right questions and make any contribution themselves. How can this lawyer actually suggest possible technological alternatives which may result in a significantly improved environmental result and sometimes even a complete solution to the environmental problem?

This problem is analagous to the patent lawyer who helps the scientists or engineers design a product or process to avoid infringing the claims of issued patents belonging to others. While the patent lawyer may not be able to readily say whether the solution suggested is commercially feasible, he/she can often suggest technological alternatives based on knowledge of patent law and knowledge of the technology involved. In fact this is an exercise to which I subject some of my students at Franklin Pierce Law Center. I give them some patents and ask them to suggest technological alternatives which will avoid infringing the claims of these patents. As these patents were ones in which I was involved in designing around, I can tell them later what actually happened and how they were avoided.

Thus it would appear that it would be very useful to use these technologically trained (technologically literate?) lawyers in environmental matters, not only in the advocacy activities of a lawyer but, and possibly more importantly, in avoiding environmental problems in the first place by giving appropriate advice to a company which may be endanger of polluting our environment.

In this regard I want to call your attention to a more detailed paper making the same point by Dr. John H. Roberts, a Franklin Pierce Law Center student, which was written as an independent study. The paper, entitled "The Role of the Scientifically and Technologically Literate Attorney in the Application of Preventive Law to Law Entropy Corporation Decision Making and Long Range Planning," will be published in the near future.

Reactive Law

Many lawyers practice what might be called "reactive law". When their client has a problem they do their very best to solve the problem. However the nature of the practice of law is such that it is very difficult for many lawyers to go to their client and suggest that the lawyer investigate some of their client's activities to see if the lawyer can avoid any problems which may arise in the future. This is particularly difficult when the lawyer may have to charge the client $100/hour or more.

Preventive Law

However there are a significant number of lawyers who are employees of corporations. These lawyers have the

responsibility, and many would say the obligation, of preventing problems from arising.

To analogize with the practice of patent law within a corporation, when a group of scientists or engineers are starting to do research in a new area of technology the patent lawyer frequently will make a "state of the art" search to uncover patents in the field in which the research people will be working. These patents are gathered merely for their technological information as it has been shown a number of times that a scientist needs both a technical literature search and a patent search in order to get the most complete information about a technological field.

Later when the scientists are beginning to reach solutions in their quest, the competent patent lawyer will make a preliminary search to see whether the practice of the technology being suggested would infringe patents owned by others. At that time, while the research is still being conducted, the patent attorney can identify patents of concern and make specific suggestions to the technical people of possible alternatives.

Experienced patent lawyers have found it is not useful to ask a scientist or engineer "How else can you do this?". The scientist or engineer is usually so immersed in his particular solution that it is difficult for him to suggest alternatives. The patent lawyer, however can use her technical knowledge and suggest specific technological solutions which will avoid the claims of the patent. Some of these solutions may not be technologically or commercially feasible. However frequently one or more are feasible and at the early time in the development of the product a change can be made at little, if any, expense. Thus infringing the patents of others can be avoided.

This is much more feasible than attempting to avoid patents after a factory has been built, production has been initiated and products are out in the market.

The Technologically Literate Lawyer

Thus one can analogize that a competent technologically trained environmental lawyer should be able to help his client or employer avoid ecological disasters. A competent lawyer will not only know the present law in his field of expertise but should be

able to make some not unreasonable predictions as to which way the law is going. This is certainly true in the environmental field.

Also the competent technologically trained lawyer will not have to rely completely on the scientists and engineers of his client or employer for what they are doing, what effluents may enter into streams and rivers, what materials are passed into the atmosphere, etc. The technologically trained lawyer can determine these for himself and suggest solutions for problems that may arise as the product or process is being developed.

An Example

Specifically I was involved in one incident where a former employer was selling a chemical solution which included a ferricyanide material which was used as a photographic developer. Ferricyanides are not something a person would wish to drink but properly handled are not regarded as unduly dangerous.

A container of this material was sent to the company research lab with a request that possibly a better material could be found for

future use. Upon opening the container, which was a transparent bottle, the chemist involved immediately smelled the distinctive "bitter almond" smell of hydrocyanic acid, also called prussic acid. As those of you who are mystery fans know, the detective finding someone who has been poisoned frequently smells the mouth of the deceased and says "Ah ha, bitter almonds", and announces the victim has been poisoned by a cyanide material.

While the company involved did not manufacture the chemicals sold in the bottle it had its trademark and instructions on it. It would have been a difficult liability problem, to say nothing of the overall moral responsibility.

Patent lawyers are noted for never throwing anything away and in a 1940 edition of the "Reference Book of Inorganic Chemistry" by Latimer and Hildebrand there was found the statement "The ferricynanide ion...decomposes slowly in the sunlight." What some thought might be a major chemical problem turned out to merely be a matter of substituing an opaque bottle for the transparent bottle. The ferricynanide ion is stable over a significant period of time if it is not exposed to light.

It should be noted that a chemically trained lawyer will fully appreciate the danger of cyanide not only to those breathing it but also realizing that cyanide is a material which can enter the bloodstream through the skin so that if some is spilled upon a person's skin in any significant quantities it is extremely dangerous.

A Lawyer's Duty and American Bar Association Model Codes

Lawyers are taught in law school that "a lawyer ordinarily has no duty to initiate investigations of a client's affairs."[2] This is normally the situation in private practice and lawyers usually do not go out of their way to check into their client's activities. However the lawyer employed by the corporation has a responsibility to handle the corporation's legal affairs and that responsibility must involve investigation of the employer's activities and doing the best the lawyer can to prevent problems from occurring. I think it may be argued that all lawyers have an obligation "to save" a client or employer from the client's or employer's actions by helping the client or employer avoid the expense and other disadvantages of a significant problem, such as an environmental problem.

If the lawyers had really dug into some of the initial indications that certain products tend to cause cancer, the corporations involved would have been much better off, to say nothing of many people who have contracted cancer or other diseases because of exposure to the product involved. Let's look at a few other portions of the American Bar Association Model Code of Professional Responsibility and the Model Rules of Professional Conduct.

For instance the American Bar Association Model Code of Responsibility as of August 1983, provides, under Canon 2, Ethical Consideration EC2-7, that "few lawyers are willing and competent to deal with every kind of legal matter..." Unfortunately the legal profession has not yet started to utilize the concept of the medical internist whose job is to find the problem and then recommend that an expert in that particular field solve the problem. Under such a legal internist system, if a lawyer came across an environmental problem he might refer the client to an environmental legal expert, who might very well have a technological background, rather than look up the law and try to solve the problem himself.

While lawyers usually learn primarily about advocacy in law school it is clear that a lawyer may also serve as an adviser. For example Canon 7 Ethical Consideration EC7-3 of the ABA Model Code provides "a lawyer may serve simultaneously as both advocate and adviser, but the two roles are essentially different... [9] a lawyer serving as an adviser primarily assists his client in determining the course of future conduct and relationships." Footnote [9] states "...the counselor's obligation should extend to requiring him to inform and to impress upon the client a just solution of the problem, considering all interests involved." Thode, The Ethical Standard for the Advocate, 39 Texas L.Rev575, 578-9 (1961).

In addition Ethical Consideration EC7-8 states "In assisting his client to reach a proper decision it is often desirable for a lawyer to point out those factors which may lead to a decision that is morally just as well as legally permissible."

The Model Rules of Professional Conduct of the American Bar Association which were adopted August 2, 1983, provide in rule 2.1 "In rendering advice, a lawyer may refer not only to law but

to other considersations such as moral, economic, social and political factors, that may be relevent to the client's situation." Also under that rule a comment entitled "Offering Advice" provides, as stated above "A lawyer ordinarily has no duty to initiate investigation of a client's affairs...,"

However that same comment concludes with the statement "...but a laywer may initiate advice to a client when doing so appears to be in the client's interest."

The Technologically Literate Lawyer-An Activist View

Normally the Model Code of Professional Responsibility and Model Rules of Professional Conduct are regarded as setting limits for what a lawyer should not do and are usually not necessarily regarded as guidelines for how a lawyer should operate, although some of these portions of the code and rules are in that mode. However in view of the sometimes tremendous penalties involved for a environmental disaster which may often include bankruptcy, very large judgements, etc., a lawyer may have to take the initiative to investigate a client's activities and recommend action which "appears to be in the client's interest."

In saying this I fully realize that it may not be easy for a lawyer to convince a client of a particular course of action. However a skilled lawyer is trained to be able to convince. With the use of his/her convincing abilities, particularly when combined with a useful technological background, and a substantial amount of persistence, the lawyer may be able to succeed in preventing the client from being in significant environmental trouble. In any event I believe that a lawyer has a duty to try.

FOOTNOTES

[1] 5 U.S.C. Section 500. 35 U.S.C.Section 31.

[2]American Bar Association Model Rules of Professional Conduct (August 2, 1983) Rule 2.1 Comment

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