

## PATENT SERVICE: REAR GUARD OF RESEARCH\*

BY WILFRED W. SMITH

Textile Fibers Department, Director, Patent Division,  
E. I. du Pont de Nemours and Co., Inc.,  
Wilmington, Delaware

Some years ago, before the members of the Division of Chemical Education, it was my privilege to present a paper<sup>1</sup> entitled "Patent Service; An Arm of Research." At that time the functions of a Patent Service were outlined briefly, its broad personnel qualifications were discussed and some detailed consideration was given to its library function which provides a reservoir of technical information useful as an adjunct to Research.

Among the functions visualized were those important ones of converting inventions into patent applications, and guarding industrial progress from patent infringements, while assisting in the negotiation and administration of patent licenses. It is this group of functions which assures the research organization freedom to enjoy the fruits of its researches. It is this group of functions that inspires the thought of Patent Service; Rear Guard of Research.

Since the functions themselves are rather self-evident, no useful purpose will be served by detailed expansion. Instead, and in keeping with the theme of the symposium, attention will be given to the lanes of communication needed to supply Patent Service with information required to discharge these responsibilities. The organization and operation of a Patent Steering Committee (you may prefer a different title) are the marching orders for rear guard duty. The conversion of research elements into patent protection affords a major contribution to a company's welfare. A patent application maturing into a patent may forestall the issue of an adversely held patent, thereby avoiding an infringement problem. A patent may afford an opportunity to trade with a competitor, again avoiding infringement probably at remarkably low cost when compared with extensive, infringement-avoiding research or acquisition of patent rights by purchase or license. In other instances, a dominating or exclusive position may be created which permits a company to pre-empt the field clearly. As new patents are secured, an extended control of the commercially useful portions of the field may well maintain a highly advantageous position in a competitive market.

If a trading position is to be maintained, the stock-in-trade on the patent supply shelf must be replenished while the quality of these patents must be held at high level to command a fair price in the market place.

The Patent Steering Committee, then, will be staffed by representatives from the research group and from Patent Service. Perhaps the simplest approach is to consider the Committee as a meeting between the Research Director and the Patent Service Director with the objectives of creating and implementing a program designed to best protect the research interests; agreeing upon the relative value and importance of the several items; assigning priority and personnel limits; and agreeing upon the supply of needed information. The Directors will obviously wish to have in attendance from their respective groups, assistants who are familiar with sufficient detail to permit evaluation of ideas. The Patent Service man or men assigned to carry out the specific assignments of that Committee will be able to discuss prior art and other patent limitations. They may also record the Committee proceedings. The Research men at supervisory level will wish to be on hand, as will certain supervisory members of plant operations, technical service, customer service and sales organizations, because the questions of patent infringement, license and protection may involve any or all of these groups. For convenience, all of such groups will be referred to collectively as Research groups. Their reactions and comments may importantly affect the course of action to be taken.

Depending upon the scope and magnitude of the respective responsibilities of the Directors involved, a number of such committees may be required. In the writer's experience, with responsibility for patent matters originating in a large department, it has been found preferable to have a separate steering committee for each branch of research effort. Thus a separate committee meets to consider the problems arising in the fields of each of several Research Divisions. Meetings are usually attended by three members from the Patent Division and by

\*Presented before the Division of Chemical Literature, American Chemical Society, Minneapolis, Minnesota, September 14, 1955.

<sup>1</sup>W. W. Smith, *J. Chem. Educ.*, **20**, 603 (1943).

three to ten members from the research group, depending on the program agenda under consideration. While no schedule of meetings can be described as best, experience suggests quarterly meetings. The size and nature of the program will usually dictate meeting frequency as well as committee size.

Assuming for present purposes that the committee is organized, let us look in on a typical meeting. About a week before the meeting, the recorder (a Patent Service man) will have prepared and distributed an agenda listing all known items; setting a time and place for the meeting; and offering opportunity for all attending personnel to review, with their colleagues, the listed items together with any new items which should be included. The agenda will include closed, active, deferred, and new items. A reminder list for discussion purposes helps to dispose of items of border-line, premature, or ill-defined nature.

The meeting may open with a review of closed items. Some will have been closed by the filing of a patent application. The group closest to the technology involved will express any desire to follow the prosecution. In some cases the invention is isolated and the application so self-contained that no further attention by the originating research group need be given. In other cases, where a series of applications develops over a broad and active research front, a continuing contact with the originating group is clearly indicated in order to facilitate integration of new and changing aspects into the series. Some cases will have been closed as unpatentable or of insufficient technical interest. In such instances a close-out letter, explaining reasons for closing, will have been sent out by the Patent Service man during the interim between meetings. The technical people will have a last opportunity to comment, or in rare instances to reverse a decision, when these items are reviewed. Of course, it is understood that even though an item is closed without filing a patent application, it may be reopened in the future if new evidence of patentability or technical merit appears. It will be the responsibility of the originating group to reopen the subject. The status of prior art searches, infringement searches, infringement opinions and license negotiations will be punctuated in similar fashion.

The active items will next be reviewed with a brief status report on each by the Patent Service man. At this point more technical information may be offered or demanded and arrangements will be made for its treatment or supply. New developments may be reported which will change the emphasis, the patentable novelty, or the scope of the case. They may cause even the abandonment of the effort. Committee discussion will weigh this evidence and a decision will be reached. Sometimes the disposition of the case will be left to detailed consideration by

the Patent Service man and the Research supervisor involved. Resolution of the problem may be by correspondence, by personal conference, or both.

Some active items obviously will mature faster than others. Some labeled active at a preceding meeting will, sad to say, have remained untouched for lack of data, time, or interest. The committee will review the over-all position of the several active items and assign priority of attention. This permits an assignment of personnel effort and should eliminate or minimize the number of items which remain untouched month after month because someone had no time to read the last letter that someone else wrote. Before a final priority list can be compiled, however, any new items must be examined, for some may be important or urgent enough to take precedence over others already on the active list.

A new item usually is introduced to the committee by correspondence, although there is nothing to prevent oral introduction at the meeting. New items may be volunteered by research people, may stem from an inquiry by a Patent Service man resulting from his examination of a research or operating report, or from a visit to laboratory or plant location. In some instances, research people may ask for a preliminary opinion on patentability or operating people may seek advice on possible infringement to result from a new plant process. Sometimes the customer service people will want to know whether they may safely instruct customers on the use of certain products without inciting them to infringe adversely held patents.

Each new item eventually is given an identifying designation and, if none has been submitted already, a memorandum (usually called a Patent Proposal) will be sent to Patent Service setting out sufficient detail to orient the subject and permit study to begin. This proposal may have to be supplemented as the study proceeds. The Research Director will allocate responsibility for the technical side while the Patent Service Director will assign personnel to handle patent aspects of the new item. All new items then will be integrated into the list of active items except those which may be summarily rejected because of technical defects or because known prior art leaves no residual novelty.

Another type of item is described as deferred. In this category may be placed those items of probable merit which lack adequate technical data to define invention; those which have adequate technical data but which lack clearly defined utility and patent value; or those occasional items which have all prerequisites but for which time and personnel are inadequate for immediate attention in the face of a large and difficult active item list. After due deliberation by the committee, items may be shifted to or from the deferred group. Some may even

move to the closed group because of a change in technology, interest, or information regarding patentability.

The committee eventually compiles a list of active items, arranged according to priority of attention for whatever reasons, and agrees upon a distribution of effort by assignment of personnel to follow each item.

In the list of discussion items the committee will include those subjects which seem to defy tangibility or which are so immature that proper allocation elsewhere is impossible. This list comprises the forget-me-not items. Some of these items occasionally turn out to be Ever-lasting Flowers. Experience recommends the plucking of such blooms after about three years. If an item hangs on the vine that long it is doubtless lacking in vitality and may well be discarded to be revived only on its merits if it ever develops any.

Although not discussed in detail above, it will be apparent that similar treatment will be accorded other items in the patent field. Potential infringement problems will be listed by the committee and communication lines established or confirmed. The views of the research group toward licensing under a patent; the working of patent references to check operability of questionable examples or to check anticipation of new ideas; and the review of need for or distribution of foreign patent protection may all be scheduled by the committee for handling along similar communication channels.

Subsequent to the committee meeting, the minutes will be released by the recorder so that all concerned may be acquainted with the outcome of deliberations. The Research Director involved will be able to recognize and allow for commitments of his people in development of the patent program. A copy of the minutes to other Research Directors and to General Management will serve to inform these people of the nature and extent of the program. The Patent Division, by integration of minutes from the several Steering Committees, if there be more than one, is able to plan activities and to allocate effort and personnel to best advantage. If

the filing and prosecution of patent applications is performed by a patent attorney who is not a member of Patent Service, a copy to him will prepare him for things to come.

Thus the Patent Steering Committee sets the course for complete follow-up of each item. Lines of communication, useful for correspondence or conference, are established. Detailed consideration of data for adequacy, cooperative planning to secure additional exemplary or equivalent material, compilation of a history of an invention, and recording of notebook or report references will follow these lines until the assignment is complete.

Although shared to a considerable extent by the research groups, it is a paramount duty of Patent Service to sense invention and to secure exclusive protection where possible. This means an early and continued contact between Research and Patent Service, an opportunity to discuss what is going on in research, why the specific research is undertaken and how it is affected by the existing art. In this way, Research and Patent Service will find that inventive concept which is most likely to embody the research effort and to yield patent protection. They will find it in the flush of an enthusiastic research spirit when Research is active and while numerous people are discussing the idea. Together they may create a framework for a patent application and the idea may grow with the experimental evidence rather than appear suddenly as a strange, cold notion lingering for enthusiasm.

It is abundantly clear that no research project should be considered complete until patent aspects have been adequately explored. It is also clear that no new procedures in plant operations, especially if they are radical departures from previous experience, should be undertaken on large scale without inspection of prior art to measure potential infringement of adversely held patents. These alone justify the establishment of clean-cut communications through a medium, such as the Patent Steering Committee by Patent Service; Rear Guard of Research.