The Licensee-Purchaser's Position

Key negotiation points, information sought, other tips from Celanese officer

BY HOWARD L. PILAT*

Celanese Corporation is in the top rank of chemical companies in the United States. We focus heavily on petrochemicals, fibers, plastics of the engineering resin type, engineering films, specialty coatings, and specialty chemicals. My own division, the Celanese Chemical Company, has grown from the time of my joining Celanese in 1952 from about $30 million per year in sales to over a half-a-billion dollars. And we expect to continue to grow. As with others, of course, we seem always to be subject to increasing pressures on profit margins. To maintain and improve profitability, to expand, and to find new products we need to develop (as does every progressive company) technical strengths other than our own. Since we can only self-generate a small fraction of the technical capability we need within the primary areas of our interests, we often buy technology and to do this, we maintain a worldwide lookout and contact with centers of technical excellence. This allows us to be knowledgeable and to work out satisfactory license arrangements with outside companies. In this way, Celanese complements its own internal technical capabilities.

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The three components related to licensing which I was asked to cover using Celanese as an example and my own personal experiences as a basis are: (1) key negotiation points, (2) from whom do we buy technology, and (3) the type of information we look for.

Direct Purchases

At Celanese, we use the services of and have good relationships with many of the top-flight engineering companies. However, we have the attitude that we prefer to buy our technology directly from technology sources rather than from engineering companies which control process technology via sublicensing.

One reason for this is that we have no large central engineering staff of our own. Engineering is not our business. Manufacturing/selling is our business. We expect engineering companies to be broadly expert in their engineering discipline and outstanding in certain engineering specialties. If they exercise an exclusive control over certain processes, our general attitude is that we must expect they will sell to all comers, yet we will have to give them the engineering order for that particular process. On the other hand, if they are interested in general engineering contracting, we will and do look to other sources for the technology itself. Furthermore, if we do license through engineering companies (and we have) we redouble our efforts to do our own comparative technology analyses looking for alternatives. We also may seek to separate the technology source engineering work from the process engineering work if we can, and certainly we'll try to separate it from the detail engineering. Moreover, we often will give the construction to a third or a fourth company.

All of this may sound as though it makes for surplus effort or extra money spent. We prefer to believe that the Celanese approach is to maximize the individual expertise of each outside organization. And we do this through use of our highly developed project team organization. This organization oversees the work of the engineering companies in great detail. The engineering project teams at Celanese consist of representatives from key functions including manufacturing, process design, maintenance, controller, purchasing, and others with a project manager over all. They have staff help from licensing and others. The project manager's key objective is to get the plant built, to integrate the design and construction into the operating plants' responsibility. At the same time, they must integrate the best of our research efforts and those of the licensor into the new project.

Of course, the techniques and methods used by the project team must relate directly to specific, well understood company objectives. They must be alert to keep their eye on the goal.

Two Priorities

What are the two general technology purchasing priorities of Celanese Chemical Company? These can be separate or combined. First, we always look for breakthroughs, highly innovative concepts, either patented or unpatented, that may have been proven only through bench scale. The ideal is that a breakthrough in a small area may represent for us a portion of a new, complex chemical process. We are not vitally interested in complex package plants. If we would require a simple oxygen plant, on the other hand, we could hardly expect the package oxygen plant to be dramatically better than our competitor's.

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In the petrochemical business our competition is getting tougher both from local companies and worldwide companies. Now, I don't see how any company can obtain a unique advantage through licensing of packaged processes available to all. So second, we look to purchase technology which is capable of being improved or optimized through technology and other input from Celanese Chemical Company's capabilities. We have been able to develop highly competitive systems this way, i.e. adding to licensed technology some self-generated technology, or even more complex, to add two or more separate licenses.

For example, when Celanese licensed an acrylonitrile process, we did not license the entire process. We essentially licensed the catalyst concept: one catalyst in a multi-catalyst system, and in a multi-product plant. It was a very key ingredient. But that was only one piece, and we successfully used our own R&D for most of the rest of the system. Thus, our prime interest is to work with outside companies on new, highly innovative processes not immediately available to our competitors, still in bench scale, and adapt this lead to our R&D programs.

In the case of piloted new processes, Celanese has invested millions of dollars in repiloting processes which already were piloted by the licensor. This we do with the goal of building our own capabilities into the process. Now, the harder it is to find the licensable key ingredient, the better we like it. It means others may not see it, we may get a jump. To develop our awareness of outside R&D we use literature and patent approaches. We also maintain close and continuing personal contact with centers of technical excellence. We even use some consultants and some university professors. During the course of the last decade or two, Celanese has built an understanding and appreciation of the strengths and sources of various technologies available throughout the world particularly in West Europe, Japan and the U.S. We find, in that regard, that often it's easier to negotiate mutually-satisfactory licenses outside the United States. The technology sources there usually are not our direct competitors.

Now to the subject of negotiations. Since we expect to make our own contributions to the licensed technology, we negotiate to obtain licenses that do not require us to share our technological improvements with the licensor or his other licensees. If there is some form of feedback or grantback required, we attempt to minimize the impact by various means. One way is via time limitations and another is to obtain compensating advantages through input of new information from other licensees. We negotiate to keep confidentiality and nonuse restrictions within reason and to relate their term reasonably to obsolescence factors in technology. We negotiate to keep fees and royalties related to the value of the technical input received, as a function of the technology needed. Remember that royalties often are paid before the first sale of the product is made. For example, for one process we took four licenses. If we paid four full process fees, there would be no room for any profit on our part.

If I was asked to point to one key requirement for success in this type of technology activity, I would have to say that my position as a participating decision maker of the senior staff of my company was most critical. Being aware of present and future needs of the company while contributing to its management in operations, in manufacturing and planning, marketing, research and development, is a critical requirement for sound action in the acquisition of technology.