Making Licensing Decisions

A review of factors to consider when the question "to license or not to license" is to be answered

BY PLACIDO SCAGLIONE
and FRANCESCO BIASIA*

THE LICENSING DECISIONS

A licensing executive spends a great deal of time making marketing decisions or trying to help others in his company make marketing decisions. "To license or not to license?" that is the question! And there are other questions: "To whom not to license?" "How to offer the technology?" "How to promote the licenses?"

What we are saying in the following is not perhaps new to many licensing executives. A review of what is said or done in the daily job may, however, help rationalize decisions and support suggestions.

TO LICENSE OR NOT TO LICENSE?

In the technology market, three types of operators act:

1. Companies offering technologies developed for their own production.

2. Companies having as sole or prevailing activity the development and marketing of technologies (for instance, UOP Process Division in the refinery and petrochemical field).

3. Engineering and construction contractors and equipment suppliers offering, in connection with their own services or supplies, their own technologies.

Sometimes, companies of groups 1 or 2 are also involved, directly or through subsidiaries, in the engineering activity. They offer, along with the technologies, a wide range of services for plant engineering, construction, and operation.

In the following we will devote special attention to the problematic of a group 1 company. Since it operates in both technology and product markets, in making its licensing decisions has to conciliate two conflicting interests, and often to settle between two conflicting departments within its organization.

We are trying to summarize the reasons in favor of and against licensing.

Issues in favor:

1. The owner of a technology, especially for a capital-intensive production, is not capable of exploiting the technology in all territories and to take advantage, by its own investments, of all possibilities the world market may offer.

Therefore, the high R&D expense for an advanced technology would not have an adequate return, should the owner not be able to find partners for a joint exploitation of the technology (joint-venture) or licensees prepared to pay for the use of the technology. License revenues may cover a great share of the company's research expenses.

2. Licensing is an incentive to (and a means for) updating the technology. A "not-licensed technology" is destined to become obsolete. It becomes old because the plant where the technology is embodied substantially freezes for all its life the technology more or less at the development stage achieved when the plant was erected.

Frequent design of new plants allow a continuous testing of new ideas and achievements and consequently a continuous improvement of the technology. Licensing is often the only opportunity, through a long period of time, to design new plants.

Competition

Furthermore, licensing presses the technology owner to a continuous glance at the competitors' developments in the same area, and to reply by new research efforts to any new steps of the competitors. If the owner does not promptly react, he is thrown out of the market for that technology. If he does not license the technology the need of having it improved is felt by a certain hysteresis, when it plans a new investment.

1. Grant-back from licensees may contribute to technology improvement.

2. Licensing enhances the company's reputation, helps its internationalization and may pave the way to several forms of industrial, technological or market cooperation with other companies.

3. For companies involved also in offering engineering and construction services, licensing results in profit opportunities originated also from these activities.

Issues against:

1. Licensing creates competitors and reduces the market area for the licensor.

2. The restrictions of the freedom of negotiation imposed by antitrust regulations and by the laws of many technology importing countries, do not permit contractual provisions which could protect certain market interests of licensor (export bars, price fixing, market sharing and the like).

3. Licensees often practice an unfair price policy in cases in which:

• They have the benefit of low raw material and energy cost (e.g. oil-producing countries), of low labor cost (overpopulated and low-industrialized countries),

*Montedison S.p.A.—Milan, Italy.

of incentives to investments (grants or low-interest loans by governmental or international agencies for development).

- They practice a price policy not determined by the "profit law," but by balance-of-payment requirements (e.g. Socialist countries).
- They are newcomers who have to conquer by any means their market space.

Secrecy Obligation

4. Licensees' secrecy obligation does not fully guarantee licensor, especially when the licensee operates in countries imposing unreasonable limitations to the duration of such obligation and is not allowing limitations as to the use of the know-how (quantity limitations, sublicensing restrictions and the like).

5. Licensing and relevant technical services (promotion, know-how supply, training, technical assistance, etc.) divert the technicians from the activities closer to the main interests of the company (production, investments, etc.).

The weight of the "pro" and "against" licensing can be evaluated by the licensor only when he is confronted with actual situations, taking into account, among others:

- In case other companies are prepared to offer licenses for competitive products and technologies a license refusal cannot prevent the planned investment and the connected risks listed above.
- A restrictive license policy may lead the companies interested in carrying out the relevant production to devote their research efforts to developing their own technologies. This may lead to the end of the monopoly status in the relevant technology.

TO WHOM NOT TO LICENSE?

The technology owner who has positively replied to the question "to license or not to license," and has defined his licensing policy will evaluate the risks connected with each transaction. Here, we are going to consider only risks that typify transactions on technology, leaving aside risks common to commercial transactions such as those due to the political, economic or monetary instability of the country where the licensee operates.

The risks we are considering will be weighted taking into account i.e. that through the license agreement a long-term relationship is established which shows even some characteristics of a partership, and therefore calls for a behavior of mutual trust:

1. A first group of risks relates to the licensee's technical capability (to be evaluated also in connection with the degree of sophistication of the licensed technology). A licensee unable to become well acquainted with the technology or to give a proper technical support to the licensed production can cause a number of problems. The know-how transfer and training of the licensee's personnel become highly burdensome. Delays and troubles in the construction, commissioning or startup of the plant protract the licensor's technical involvement. Unsatisfactory performance of the plant or poor quality of the product can involve the licensor in responsibilities relating to the licensee's incompetence and this always negatively affects technology or product reputation.

Moreover, one could hardly expect to receive, under grant-back provisions, a significant contribution to the improvement of the licensed technology from such a business.

2. A group of risks relates to the prospects of royalties earnings. A company showing limited investment possibilities and weak enterprise in developing the market of its products, never will be a good royalty producer. It never should be considered a prospective exclusive licensee of an innovative technology or product.

3. Risks encumber on the exclusivity of know-how. Leakages of your know-how are likely if a potential competitor offering less competitive technologies, or carrying out research programs in the same area, is bound by some association links to your licensee (e.g. controlled by the same company) or cooperates with him in contiguous areas. If you license an innovative technology in countries imposing a short period of secrecy or the grant to the licensee of an unlimited sublicensing freedom, or you authorize your licensee to entrust with the plant engineering a contractor offering similar services for the technology of your competitors, you certainly jeopardize the exclusivity in the ownership of your know-how.

HOW TO OFFER THE TECHNOLOGY?

How should the technology be offered? Direct offer by licensor or offer through contractors? Through a sole contractor or through several contractors? General rules cannot be fixed.

Certain processes can be offered only through engineering contractors, or at least with their support. For instance, processes for plants usually offered on a lump-sum basis, processes for plants the rentability of which is widely affected by the design skills of the engineering contractor and by its capability of managing all the engineering services.

In most cases, however, the direct offer by the licensor appears advantageous. The licensee is fully free to select the contractor, and its direct contacts with licensor enable it to assure a closer cooperation as to, for instance, the continuing know-how, the training of personnel, and the technical assistance. On the other hand, the licensor may better protect its market interests and its rights on the process. In many cases the direct cooperation between licensor and licensee may pave the way to a wider cooperation between the two companies—cross-licenses, joint research, buy-back arrangements, and the like.

If the technology is offered directly by the owner, the offer through several contractors even acting in the same territory (this competition may help both licensor and licensee) may be advantageous. The offer of technology worldwide through a unique contractor leads to a "de facto" co-ownership of the technology. After a certain period of time it is not likely the technology owner could offer that technology through other contractors.

HOW TO PROMOTE THE LICENSES?

Promotion may play a decisive role in the sale of technology. Often the commercial success of a technology not showing special advantages is the result of an efficient promotion.

The high professional level of the prospective licensee's experts entrusted with the selection of technologies calls for sophisticated promotion techniques. Scientific and industrial information are two important items of these techniques.

The scientific education of the licensee's experts is, in a certain field of technology, also the result of the scientific information given by the owners of the technologies competing in that area. Their choice is affected by this education and therefore by the information the scientists and technicians of the competing company have given on their technologies by scientific or technical publications, papers read in meetings, seminars, workshops and the like. In giving this information you are confronted with the confidentiality limits. But in principle it is always possible to show interesting features of your research achievements without disclosing what you are not willing to disclose.

The active participation of scientists to scientific meetings and seminars and to the first contacts you have with the prospective licensee may largely contribute to the positive qualification of the technology you are offering and of the technical support the licensee can expect from you.

Also the information on the industrial achievements must be well followed: any new plants adopting the technology, any new license, any new improvements may offer the opportunity to call the attention on your technology, on its features and advantages. The list of the processes available for license and short articles thereon published by some magazines can give a good flash on your processes.

Periodic visits to the prospective licensee may be helpful, if the person taking the promotional action has technical background and professional education allowing him or her to be effective. It should never be forgotten that the experts of the prospective licensee expect to get "something" from the meeting: information, data, opinions as to the offered and the competing technologies, and to the whole area to which the technology belongs (research and market trends, raw-materials market, end-uses developments, possible future alternative routes, and the like).

In that technological field, he shall know "something" more and not less than the licensee's experts. It may be useful to prepare a promotional brochure for each process, if carefully worked out. The process description must be concise and show only the essential features of the process. The process history is recommended only in case it is scattered by some successes. Space must be left to the experience the scientists and technicians of the company have acquired on the process and in the relevant technological field. The economics of the process may be seen with some optimism, but must be such as to enable to switch by well thought-out reasons to the "expected values" that are disclosed during the subsequent precontractual negotiations.

Finally, marketing is a sophisticated feature of the licensing job. It requires the cooperation and the support of many departments (research, process development, engineering, planning, production, product marketing, publicity, etc.). The license executive must be conscious of his personal limits and must do his best to promote this cooperation. The closer the cooperation, the better the results.