proceedings before the European Patent Office will be conducted in English will eliminate the cost of translations for American companies. For the most part, the cost incurred by representation by foreign agents before the various Patent Offices should be reduced since American practitioners will be dealing with only one body of law for Europe instead of a multiplicity of laws. In addition, the substantive law of the Convention is in most instances similar to present American patent law.

The European Convention further provides that any natural or legal person not a resident of one of the Contracting States will not be required to obtain a European agent during the process of filing the European patent application. Under this Article of the Convention, United States practitioners, whether private or corporate, will be able to prepare and file European applications without the necessity of retaining a European agent. However, the American applicant will have to retain a foreign agent and act through him in all other proceedings before the European Patent Office.

A second Convention, the Convention for the European Patent for the Common Market, will be negotiated in Luxembourg in May of 1974. This Convention, which will operate together with the one signed on October 15, will create an almost completely unified patent law for nine member States of the EEC.

This is particularly significant for United States business since the second Convention provides that the EEC countries may not make use of certain reservations available under Article 167 of the first Convention relating to the terms of patents and to certain exceptions to patentability. This provision is of importance to the chemical and pharmaceutical industry in respect to Italy which does not permit the patentability of medicines under its present national law.

Under the proposed procedure the member States of the European Convention have declared their intention of bringing into force the Patent Cooperation Treaty at a date which will not be prior to that of the entry into force of these two European Conventions. In other words, the member States of these European Conventions will ratify or accede to the PCT at the same time the two European Conventions enter into force. Entry into force is expected within 3-4 years.

**Author undetermined.*

Industrialisation Policy

TRENDS IN THE INTERNATIONAL LICENCE TRADE

by
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The term "international licence trade" signifies the worldwide buying and selling, across national frontiers, of technical and industrial licences. In contrast to the trade in goods, which involves the exchange of material goods, the transfer of licences concerns immaterial goods, i.e. legally protected industrial property rights (patents, registered or ornamental designs, copy rights) and unprotected technical knowledge and inventions (the so-called "knowhow").

Before attempting to draw any conclusions from the statistics[1] published by the most important countries in respect of the transfer of licences across their national frontiers, we propose to survey briefly the present state of the world trade in licences. The Western industrial countries, and in particular the United States, Great Britain, Germany, France, Italy, Switzerland and Japan, are the most important buyers and sellers of licences in the world market.[2] The state-trading countries are still playing a relatively minor role as licencers and licencees, but even they are showing growing interest in the licencing sector, and that in a manner which makes it almost possible to discern in the attitude they display the first beginnings of an economic integration on an international plane.[3]

As for the developing countries, they naturally appear on the international market for licences almost exclusively in the role of buyers.[4] In 1964, the developing countries are estimated to have acquired, in terms of value, no more than 8 p.c. of the total licences on offer in the world market,[5] and there has been no change in the situation since then.

The United States plays a predominating part on the world market as licencer. It is estimated that in the year 1966 something like 70 p.c. of all the royalties due in respect of licences were received by the USA, whereas that same country's share in the total amount spent on foreign licences amounted to no more than 7 p.c.[6] The sales of American licences abroad may be divided into two categories: production under licence by independent licencees, i.e. firms unconnected with the licencer, and production under licence by dependent licencees, i.e. firms which through their capital are linked with the licencing concern, being as a rule subsidiaries.

The Role of the USA

About one quarter of the total licence fees the USA receives from abroad comes from independent foreign licencees,[7] but their number is considerably larger than that of the dependent firms working under American licences abroad. An inquiry revealed that roughly 2/3 of all the US licencing agreements were concluded with independent foreign firms.[8] In other words, about 3/4 of the total revenue received by the USA for granting licences abroad came from a few subsidiaries operating abroad, whereas the remaining quarter originated from the numerous independent foreign firms.

In this connection it is interesting to note that some change has taken place in recent years in that more and more American firms prefer to establish their own branches abroad rather than granting licences to independent foreign firms, and this mainly for the following reasons: firstly, they consider that foreign licencees do not exploit American patents energetically enough; secondly, it is thought that better management would be able to achieve a greater turnover in the patented article; and, thirdly, it is assumed that an American owned subsidiary will be able to make better use of its technical and business knowhow and thus produce more revenue in the form of royalties, management fees, dividends, etc.[9]

This kind of thinking is naturally reflected in the American licence statistics: The licence revenue from independent foreign licencees rose in the period from 1964 to 1970 by only 92 p.c., whereas that from affiliated licencees abroad increased in the same period by 148 p.c.[10] The large surplus in favour of the USA on its licence account (see Table) is due to its advanced technology — a factor which is too obvious to require any illustration — and to the country's particular export situation. Commodity exports from the United States are rendered considerably more difficulty by high domestic wages and the resulting high production costs, exchange rates and, last but not least, by its great distance from the principal export markets which involves high transport costs and long times spent in transit. All these factors contributed to the development of direct investments abroad and of the export of licences in the place of commodity exports. Thus it can be said that the restricted scope for expansion in the export of commodities has had a favourable influence on the sale abroad of American licences in that it has obliged many American firms not only to acquaint themselves with this modern form of trading, called "licencing" but also to go in for it in a big way.[11]

Great Britain

Great Britain, second largest licencer in the world,[12] belongs like the United States and Switzerland to the few countries with a licence balance in its favour (see Table). In 1970 roughly 27 p.c. of Britain's revenue on licence account came from the USA and about 22 p.c. from the (then) EEC countries. It is noteworthy that trade in licences with the (then) EFTA countries was very small indeed, the revenue from this source amounting to no more than 3 p.c. of its total licence revenue.[13] Obviously, the industrial division of labour between Great Britain and the other EFTA members was largely confined to an exchange of industrial products, mainly for the reason that under the existing free-trade agreement goods could be transfered without let or hindrance from one EFTA country to another. By contrast, the exchange of industrial products between Great Britain and countries not belonging to EFTA was frequently obstructed, be it by tariff barriers as in the case of the EEC or by the great distances from important potential consumer countries like the USA and Japan. As a result, Great Britain was able to cooperate with these non-EFTA countries not so much through an exchange of manufactures as through direct investments and the exchange of licences.

The future shape of Great Britain's licence-balance is likely to be strongly influenced by the country's entrance into the Common Market. Now that exports of British industrial products to the member states of the EEC will no longer be hampered by tariff barriers, the granting of licences will again be replaced by the export of goods. Fewer new licence agreements are likely to be concluded with partners from these countries and possibly the now existing licence contracts will not be extended beyond their date of expiry. In the long run this may mean that the British licence balance may show a deficit — but in favour of the overall British balance of trade.[14]

Remaining Europe

Switzerland, third most important licencer in the world, publishes no statistics about the licences it grants or takes up, but there is no doubt that this "small" country shows in its licencing trade with other countries a sizeable surplus[15] This is mainly due to the fact that Switzerland is an important international transmission centre for licences. The remaining European countries of importance in the international licence trade — France, the Federal Republic of Germany and Italy — all show a deficit in that sector of their activities (see Table). The reason for these large deficits is the same for all three of them. It is because all three — seen from a global point of view — have in common a multitude of important features which have a bearing on their trade in licences with other countries: they are at the same stage of technological development; their market size is roughly the same; their geographical situation is similar and they all are members of the European Economic Community.[16] The two last-named factors account in particular for their large expenditures on licences and thus for the deficits they show on their licence accounts.

The countries who do not belong to the EEC are, on the other hand, handicapped in many different ways as far as their exports to France, the Federal Republic of Germany and Italy are concerned; there are for one thing the tariff barriers of the EEC which have to be overcome and, for

REVENUE AND EXPENDITURE IN THE LICENCE-TRADE OF SPECIALLY SELECTED COUNTRIES (1963-1971)
(in mm US Dollars)[1]

	Country	1963	1964	1965	1966	1967	1968	1969	1970	1971
	United States of America	–	1,057	1,259	1,378	1,488	1,654	2,205	2,459	–
Revenues	Federal Republic of Germany	50	62	75	73	89	98	97	118	141
	France	–	–	–	–	194	164	207	213	248
(= Exports of	Great Britain	–	–	138	162	154	204	211	263	–
Licences)	Italy	32	39	43	48	61	65	65	78	–
	Japan[2]	5	7	14	19	27	34	46	59	60
	United States of America	–	127	133	139	137	181	192	193	–
Expenditure	Federal Republic of Germany	135	153	165	175	192	218	252	304	358
	France	–	–	–	–	229	275	323	349	445
(= Licence	Great Britain	–	–	130	135	143	185	212	249	–
Imports)	Italy	138	157	155	182	191	219	271	312	–
	Japan[2]	135	155	165	192	239	314	368	433	488
	United States of America	–	+930	+1,126	+1,239	+1,351	+1,473	+2,013	+2,266	–
	Federal Republic of Germany	– 85	– 91	– 90	– 102	– 103	– 120	– 155	– 186	– 217
Balance	France	–	–	–	–	– 35	– 111	– 116	– 136	– 197
	Great Britain	–	–	+ 8	+ 27	+ 11	+ 19	– 1	+ 14	–
	Italy	– 106	– 118	– 112	– 134	– 130	– 154	– 206	– 234	–
	Japan[2]	– 130	– 148	– 141	– 173	– 212	– 280	– 322	– 374	– 428

– unavailable

[1] To the extent that this was necessary, the payments have been converted on the basis of the 1972 official dollar parities

[2] The Japanese financial year starts on April 1, of one year and ends on the March 31, of the following year.

Sources: US Department of Commerce, Bureau of International Commerce, Washington; Deutsche Bundesbank, Zur Entwicklung des Patent- und Lizenzverkehrs mit dem Ausland in den Jahren 1970 and 1971 (On the Development of the trade in Patents and Licences with foreign countries in the years 1970 and 1971, in: Monatsberichte der Deutschen Bundesbank, 24. Jg., Frankfurt/M 1972, Nr. 5, p. 24; Banque Nationale de Paris; Department of Trade and Industry, Overseas royalty transactions in 1970 in: Trade and Industry, London, published 30. 3. 1972, p. 575; G. Leggio, La bilancia del pagamenti tecnologici in Italia, in: Produttività, Volume 23, 1972, no. 6, p. 426; Agency of Science and Technology, White Papers on Science and Technology, 1967 and 1972; as well as Bank of Japan, Balance of Payments Monthly.

another, the long distances over which their goods have to be transported. In the case of the USA, American exports to these markets have to contend with two additional disadvantages — their high production costs and the unfavourable exchange rates. It is for these reasons that the non-member countries of the EEC have been particularly active in developing their sales of licences to France, Germany and Italy — be it to their own subsidiaries or independent firms, in order to compensate for the shortfalls in their exports of industrial goods.

Japan — Largest Buyer of Licences

Japan, the world's largest buyer of licences, has in the last few years also become increasingly active as a seller of licences on the international market (see Table). Whereas in 1950 or thereabouts it was still assumed that it would take Japan at least another ten years to fill the technological gap which still separated it from the highly industrialized countries in the West,[17] it is now safe to conclude from the rapid growth of Japan's revenues on licence account that that technological gap has been markedly reduced and, as far as some sectors are concerned, completely closed. Initially, Japanese licence exports were for the most part directed to the developing countries in Southern Asia, Africa and South and Central America, but in most recent times more and more Japanese licences are also being sold to the highly industrialized countries, including even the USA.[18]

In this connection it is interesting to note that in the period from 1950 to 1964 44 p.c. of the Japanese licence sales were linked to exports of entire factories or complete plant equipment and that 41 p.c. of the Japanese licencers used their own network of subsidiaries abroad to manufacture the goods for which the licences were granted.[19] Another indication is that the next international licence fair is to be organised by the Japanese themselves; it is due to take place in September 1973 under the name of TECHNO '73 TOKYO.[20]

Japan's future development as an exporter of licences depends, however, not only on Japan's further technological advances, but also on general economic factors. The most important among them is the wages level. Japan's position as a low-wage country and as a seller of cheap mass-produced goods is gradually being undermined, for Japanese wages are now rising faster than those of most of the other industrial states. This is why Japan, to remain internationally competitive, is obliged to "evacuate" more and more of its wage-intensive production to countries where wages are lower, such as for instance to the developing countries in South Asia.[21] This is done by issuing more and more licences to subsidiaries who have either been founded or acquired in those countries or to independent native undertakings. In the long run this may even lead to Japan earning a surplus on licence account.[22]

Future Prospects

We have so far discussed the present state of the licencing markets in individual countries and their likely development; we now propose to deal with the world trade in licences as a whole. One thing is certain: cross-licencing between Western states is bound to increase, if for no other reason than that the political, economic and legal regulations governing the licence trade are much the same in all of them and that cross-licencing is by now to a large extent liberalized. Whether it will be possible, however, to include the state-trading countries in the world market for licences depends on their willingness to remove the obstacles which at present still impede the free exchange of licences. These obstacles stem from the different state, legal and economic structures of these countries. They are, however, beginning to realise that participation in a world-wide division of labour offers them greater opportunities in the fields of production and research than isolation on ideological grounds.[23] Some steps in the right direction have already been taken to intensify the transfer of licences to and from non-socialist countries. Trade relations have been remodelled and economic legislation reshaped in such a way as to allow their adherence to the Paris Agreement on the Protection of Industrial Property, the conclusion of bilateral treaties for the avoidance of double taxation, etc.[24] These changes give rise to hopes that the state-trading countries will progressively be integrated in the international licence market.

As for the developing countries, whose licencing trade is presently largely dominated by the Western industrial countries, their chances of participating in a more active way in the international licence market are less bright. True, their industrial development is being accelerated by the grant of licences:[25] yet, in many of these countries the import of licences is being rendered difficult in various ways, and in some cases even banned altogether.[26] The purpose of this strict regimentation is mainly to save foreign exchange by a strict check on licence fees. As the already precarious capital and foreign exchange situation of many developing countries is likely to deteriorate rather than to improve in the days to come, the obstacles put in the way of licence imports will most probably be raised rather than lowered. As a result, the granting of licences to many countries of the Third World is certain to decline, which in turn will cause these countries to move still further away from the international licence market, unless the industrial nations are prepared to accept the proposal that the fees paid for licences granted to developing countries are financed out of development aid funds.[27]

[1] Cf. F. Frowein, Der deutsche Lizenzverkehr mit dem Ausland (The German licence trade with foreign countries), in: Gewerblicher Rechtsschutz und Urheberrecht, Auslands- und internationaler Teil (Protection of industrial property and copyright, foreign section), volume 66, Weinheim/Bergstrasse 1964, no. 11, p. 566.

[2] Cf. A. Wolf and C. Werth, Der internationale technisch-industrielle Lizenzaustausch (The international exchange of technical and industrial licences), Düsseldorf 1972, p. 113 sq.

[3] Cf. W. Siech, Die Lizenzkonzeption der sozialistischen Länder (The licence concept in the socialist countries), in: Der Aussenhandelskaufmann, Wiesbaden 1968, no. 4.

[4] Cf. H. A. Havemann, Lizenzvergabe und Normung ais Sonderprobleme technologischer Anpassung (The granting of licences and standardisation as special problems of technological adaptation), in: Kübel-Stiftung, Technologische Anpassung, Fachgespräch (Technological adaptation — a discussion between experts) 4/1969, p. 28.

[5] Cf. C. H. G. Oldham and C. Freemann, The Technological Balance of Payments, in: Development Digest, Washington 1969, no. 1, p. 72.

[6] Cf. A. Wolf and C. Werth, Der internationale technisch-industrielle Lizenzaustausch, op. cit. p. 114.

[7] According to information supplied by the US Department of Commerce, Bureau of International Commerce, Washington.

[8] Cf. J. N. Behrmann and W. E. Schmidt, New Data on Foreign Licensing, in: Patent, Trademark and Copyright Journal of Research and Edition, vol. 3, Washington 1959, p. 732.

[9] Cf. Amerikanische Unternehmen mit Lizenz-Einnahmen unzufrieden (American firms dissatisfied with licence revenues) in: Die Welt, Hamburg, no. 179 of 5. 8. 1969.

[10] US Department of Commerce, Bureau of International Commerce, Washington.

[11] Cf. A. Wolf, USA — stärkster Lizenzgeber der Welt (USA — largest licencer in the world) in: VDI-Nachrichten, Düsseldorf, no. 32 of 9. 8. 1972.

[12] Cf. A. Wolf and C. Werth, Der internationale technisch-industrielle Lizenzaustausch, op. cit., p. 114.

[13] Cf. Department of Trade and Industry, Overseas royalty transactions in 1970, in: Trade and Industry, March 30, 1972, London, p. 576.

[14]Cf. A. Wolf, Grossbritanniens Handel mit Know-how (Great Britain's trade in know-how), in: VDI-Nachrichten, Düsseldorf, no. 36. of 6. 9. 1972.

[15]Cf. A. Wolf and C. Werth, Der internationale technisch-industrielle Lizenzaustausch, op. cit., pp. 57 and 114.

[16]Cf. A. Wolf, Zum Defizit in der französischen Lizenzbilanz (The French Deficit on licence account), in: VDI-Nachrichten, Düsseldorf, no. 35 of 30. 8. 1972.

[17]Cf. Geplanter Fortschritt in Wissenschaft and Technik (Planned progress in science and technology), in: Japanhandel, Hamburg 1968, no. 24, p. 105.

[18]Cf. A. I. Kirillow, Japans Lizenzhandel (Japan's Licence Trade), in: Aussenhandel, East Berlin, volume 16 (1966), no. 6, p. 44.

[19]Cf. Die Ausfuhr japanischen technischen Wissens (The export of Japanese technical know-how), in: Neues aus Japan, Bad Godesberg 1966, no. 114, p. 2.

[20]Cf. A. Wolf, Messe der Innovation, Know-how '72 — erste internationale Lizenzmesse in Oslo (Fair of Innovations and Know-how '72 - first international Licence Fair in Oslo), in: VDI-Nachrichten, Düsseldorf, no. 48 of 29. 11. 1972.

[21]Cf. S. S. Rolfe, Das Internationale Wirtschaftswachstum — Aufgaben, Rechte und Verantwortung der Internationalen Gesellschaft (International Economic Growth — Tasks, Rights and Responsibilities of International Society), XXII. Congress of the International Chamber of Commerce in Istanbul, from 31. May to 7. June 1969, Report on Principles, Part 2, p. 146; see also: Japan Fahrradmontage im Ausland vorgesehen (Japan -- Assembly of Bicycles abroad planned), in: Nachrichten für Aussenhandel (Foreign Trade News), Frankfurt/M of 30. 11. 1972.

[22]Cf. A. Wolf, Aktive Lizenzpolitik Japans (Japan's active licence policy), in: VDI-Nachrichten, Düsseldorf, no. 37 of 13. 9. 1972.

[23]Cf. H. D. Schoen, West-Ost Handelsausweitung durch Lizenzkooperation (East-West Trade Expansion through Licence Cooperation), in: Aussenhandelsdienst, volume 23, Frankfurt/M 1969, no. 21, p. 489.

[24]Cf. H. D. Schoen, Systemkonvergenz durch Lizenzkooperation zwischen Ost- und Westeuropa? (Convergence of Systems through Licence Cooperation between East and West?), in: Wirtschaftspolitische Blätter, volume 17, Vienna 1970, no. 3, p. 176.

[25]Cf. A. Wolf, Lizenzen helfen beim Aufbau — Privatwirtschaft der Industrieländer kann Entwicklungsländer fördern (Licences help with development — Private Industry can assist developing countries), in: VDI-Nachrichten, Düsseldorf, no. 33 of 18. 8. 1971.

[26]Cf. W. Martin and R. Grützmacher, Der Lizenzverkehr mit dem Ausland (The Licence Trade with foreign countries), Heidelberg 1972, pp. 37-109.

[27]Cf. W. Siech, Licences for Developing Countries, in: INTERECONOMICS, Hamburg 1968, no. 1, p. 30 sq.

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ATTRACTING NEW TECHNOLOGY: SOME VIEWS OF A LICENSER

by
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The acquisition of new technology through licensing has become a vital function of most companies in those industries where technological change is frequent. The author, with fifteen years of experience in licensing new technology in many fields, identifies and discusses some of the problems created by prospective licensees with respect to their searching for, and evaluating, licensing opportunities. He proposes a few simple procedures that may reduce these problems, enhancing the manufacturer's opportunities to acquire promising new technology from external sources.

1. Introduction

Acquisition of new technology from outside sources has become a very important function for most industrial companies, since technological changes are frequent, and in some cases, devastating to existing products.

Presumably, most companies would like to have increased exposure to promising new technology: that is, products and processes whose technical and economic feasibility have been demonstrated, and which may even have reached the pilot production stage. This definition does not include those products and processes that are in full-scale commercialization.

But what should a manufacturer do to encourage owners of technology to favour him over other prospective licensees? More specifically, how can he seek out new technology more efficiently and how can he increase the chance of owners of new technology seeking him out? The answers to these questions, of course, lie partly in his company's policies and procedures in seeking and evaluating new technology.

While some companies are skillful at seeking and evaluating new technology, many are inept. But many of the errors they make are correctable.

2. Seeking

In seeking technology from others — corporations (perhaps in foreign countries), universities, independent research establishments, and the like — a company should realize that seeking and attracting new technology is a very competitive undertaking. Frequently, several companies with the same interests will solicit the same technology sources. Consequently, one must recognize that a relationship with a source of technology involves a two-way selling effort; the source must present its technology in the best light, and the soliciting company must make a concentrated effort to convince the source that it is the preferable choice for certain types of technology.

A representative of a company, trying to learn from another company whether appropriate technology is available for licensing, usually describes his company, emphasizing its size, its product line, its engineering skills, and its manufacturing facilities. But when he is asked to name the product areas his company is most interested in, his answer is frequently something like, 'Anything that makes money'. When asked, 'should the product be industrial or consumer?' he frequently responds, 'Industrial, but there could be many exceptions'. Asked whether his company is interested in mechanical or electronic products, he may answer, 'We could do either, providing it is worth our while'. His financial goals very often are stated in terms of returns on investment or profit dollars to be made. As a result of all this, there is little incentive for an owner of new technology to consider licensing this company to produce his product.

What should have been done? First, the company should decide if it really wants to cope with new technology. Many companies that decide to copy or license proven technology do not have the resources or the willingness to become engaged in development programmes based on new technology. Such companies should recognize that fact and avoid the time and expense of going through the fashionable exercise of seeking new technology.

If a company has licensed no new technology in recent years, perhaps the reason lies not in the lack of opportunities, but in the attitude of its people responsible for decisions regarding outside technology. To many people new technology from outside sources represents a threat to status, budget, opportunity, and so forth. Should these sentiments exist strongly in the minds of people responsible for evaluations, the company will have an unblemished record of acquiring no new technology.

The company should also clearly define the product areas in which it is interested, such definitions being based on a carefully drawn plan for future growth. Of course, by