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*(Acts whose publication is not obligatory)*

# COMMISSION

## COMMISSION DECISION

**of 12 December 1990**

**relating to a proceeding under Article 85 of the EEC Treaty**

**in Case No IV/32.363 — KSB/Goulds/Lowara/ITT**

**(Only the German, English and Italian texts are authentic)**

(91/38/EEC)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community,

Having regard to Council Regulation No 17 of 6 February 1962, First Regulation implementing Articles 85 and 86 of the Treaty (1), as last amended by the Act of Accession of Spain and Portugal, and in particular Articles 2, 4, 6 and 8 thereof,

Having regard to the application submitted on 5 June 1987 by KSB Aktiengesellschaft, Frankenthal, Germany (KSB), Lowara SpA, Montecchio, Italy (Lowara), Goulds Pumps Inc., Seneca Falls, New York, United States of America (Goulds) and ITT Fluid Handling Division, New Jersey, United States of America (ITT) for negative clearance or exemption of the agreements concluded by them on 22 July 1987 for the joint research, development and production of the wet end of a single-stage, single-flow, radial centrifugal pump made from chrome nickel steel and of the production agreement concluded by the parties on the same date with Lowara as manufacturer for the production of the pump components,

Having published a summary of the application and notification (2) pursuant to Article 19 (3) of Regulation No 17,

After consulting the Advisory Committee on Restrictive Practices and Dominant Positions,

(1) OJ No 13, 21. 2. 1962, p. 204/62.
(2) OJ No C 259, 12. 10. 1989, p. 5.

Whereas :

### I. THE FACTS

#### A. The proceeding

(1) By letter dated 5 June 1987, KSB, Lowara, Goulds and ITT notified an agreement concluded by them on 5 November 1985 on the setting up of Quattro Tech. SA.

In the notification itself the parties already announced changes to the original cooperation agreement. By letter dated 4 August 1987, they submitted the two agreements concluded on 22 July 1987 which superseded the original agreement, namely the agreement for joint research, development and production and the production agreement. They applied for negative clearance pursuant to Article 2 of Regulation No 17 or, alternatively, for exemption pursuant to Article 85 (3) of the EEC Treaty.

#### B. The undertakings

(2) KSB Aktiengesellschaft (KSB) is the leading European pump manufacturer and has its registered office in Frankenthal, Germany. It has subsidiaries inside and outside the Community. In 1986, KSB acquired the largest French manufacturer, Ets Pompes Guinard, whose registered office is in Courbevoie. As a result of this acquisition, KSB became the largest pump manufacturer in the

world. Its consolidated aggregate turnover in 1987 amounted to DM 1 379 million. Some ... % (1) of this turnover came from pumps.

Goulds Pumps Inc., whose registered office is in Seneca Falls, New York, United States, is, together with its wholly-owned subsidiary, Lowara SpA, which it acquired on 5 November 1985, the third largest pump manufacturer in the world after KSB and a Japanese firm. In 1986, the group's aggregate turnover amounted to US $ 356,226 million. This includes the US $ 44,482 million turnover of Lowara SpA (1986 annual report). Like KSB, Goulds produces a wide range of pumps. Lowara forms part of Goulds' 'Water Technologies Group'. According to the 1986 annual report, Goulds has since 1981 spent more than US $ 20 million on research and development.

Lowara SpA, whose registered office is in Montecchio Maggiore (VI), Italy, and which was established in 1968, developed the know-how for chrome nickel steel components initially for smaller diameter pumps. Although now a wholly-owned subsidiary of Goulds, it is still one of the four parties involved in the cooperation. At the end of 1987, it began production of the new wet end components for all the participants. According to the 1987 annual report, the aggregate turnover of Lowara SpA in 1987 amounted to Lit 99 985 million, equivalent to DM 139 million.

The ITT Corporation has nine main divisions. One of these is the ITT Fluid Technology Corporation, into which in 1987 the ITT Corporation combined its fluid technology production plants and sales companies worldwide. One of the largest divisions of ITT Fluid Technology Corporation is the ITT Fluid Transfer Division (referred to in the agreement as the Fluid Handling Division), located in Midland Park, New Jersey. As this is the effective party to the cooperation, it is hereafter referred to as ITT. Its largest division is ITT Bell & Gosset, which is located in Morton Grove, Illinois. The pumps resulting from the agreement are sold by ITT Bell & Gosset.

Following the sale of Loewe Pumpenfabrik GmbH, Lüneburg, Germany, in 1988 to the Danish pump manufacturer Grundfos, ITT operates as a pump manufacturer in Europe through the following subsidiaries: Flygt AB, Lindas, Sweden (with its own European subsidiaries, AB Grindex, Handen, Sweden), and ITT Marlow and ITT Jabsco, United Kingdom. According to the 1987 annual report, the aggregate turnover of the ITT Corporation amounted to US $ 19 525 million. The turnover achieved by the Fluid Technology Corporation accounted for some ... % of the aggregate turnover of the ITT Corporation. The Fluid Transfer Division, including Bell & Gosset, accounted for some ... % of the turnover of the Fluid Technology Corporation (approximately ... % of the total turnover of the ITT Corporation).

(1) In the published version of the Decision, some information has hereinafter been omitted, pursant to the provisions of Article 21 of Regulation (EEC) No 17 concerning non-disclosure of business secrets.

## C. The product

(3) The cooperation agreement relates to the development and production of the wet end of a single-stage, single-flow radial centrifugal pump. These parts are being developed by a CAD/CAE (computer-aided engineering) process in deep-drawn chrome nickel stainless steel, so as to withstand the greatest possible internal pressure with the thinnest possible casing and to be suitable for mass production. Both characteristics — thin casings and mass production — favour rationalization. The wet ends, referred to in the agreements as 'units', are sub-assemblies assembled into complete pumps by each partner individually together with other parts. These pumps are constructed in such a way that their inner components can be dismantled without the casing being removed from the piping (back pull-out design). With the products which are the object of the cooperation, it will be possible to achieve high-performance capacities with mass-produced pumps of deep-drawn stainless steel. Flows of up to 240 $m^3/h$ will be obtained with the larger nominal sizes. With supplementary types using traditional casting technology, for larger capacities are reached. A number of manufacturers (Hilge, Lowara, Grundfos and Ebara) were already producing pumps using stainless steel.

The use of chrome nickel stainless steel provides considerable advantages over traditional components which are mostly produced from grey cast iron.

Its resistance to corrosion means that a chrome nickel steel pump can be used to handle a wide range of liquids from pure water to light acids and alkalis. This has the advantage that the purchaser normally needs only this one type of multi-media pump in place of many different pumps made from different materials suited to each different liquid.

Because of the use of chrome nickel steel as the basic material, all the internal surfaces in contact with the medium are smooth. As a result, flow losses due to wall friction are reduced, leading to energy saving. The stainless properties of the wetted components ensure that the product handled does not become contaminated.

The traditional material used in manufacturing pumps, grey cast iron, is a brittle material. In contrast, chrome nickel steel is a tough material, better able to withstand high pressure and vibrations without cracks or fractures developing, even under a wide range of temperatures from − 30° to + 110°.

A further factor is that the weight of the new components is only a quarter of that of the equivalent traditional cast iron components.

(4) When the agreement on the setting up of the joint venture 'Quattro Tech SA' was concluded on 5 November 1985, the original parties to the cooperation, KSB and Lowara, had not yet solved the many technical problems associated with the development of the pumps. According to the documents which the parties submitted to the Commission (minutes of meetings, reports and correspondence up to February 1988), these problems were discussed at numerous meetings attended by all the parties. At such meetings, it was decided what contribution to solving the problems was to be made by each individual partner. Under these arrangements, ITT and Goulds focused on the following :

> casing design, rigidity investigations, vibration and noise tests, impeller design and tests on its stability, hydraulic measurement, analysis of the influence of the shape of the flow area on the hydraulic performance, attachment and adjustment of the wet end components to the other pump components, questions relating to seals, welding problems and the question of quality control in series production.

(5) The technical cooperation is continuing. According to the parties, this involves in particular the following :

> endurance testing of the prototypes of the high-performance and large nominal-size pumps, laying down quality control plans and ensuring constant maintenance and improvement of quality for all sizes.

(6) In 1988, each of the four parties marketed an initial series of the new chrome nickel steel pumps.

### D. The market

(7) The pumps which are the object of the cooperation agreement may be said to form part of the market for single-stage, single-flow, radial centrifugal pumps for water with a nominal size of the outlet connection from 25 mm diameter (excluding sewage pumps). Such pumps, hereinafter referred to as water pumps, include, in particular, close-coupled pumps with axial entry connections, close-coupled pumps with in-line casings and submerged motors (in so far as they are not heating circulation pumps), bearing bracket pumps (including standardized water pumps to DIN 24 225), vertical pumps and other single-stage, single-flow, radial centrifugal pumps (e.g. U-turn pumps). As the pumps that are the subject of the agreement are to have an output of 240 to 250 $m^3/h$ (see the prospectus provided by KSB), pumps of this capacity must be included.

The relevant market does not include multi-stage pumps, chemical pumps for the transport of chemical substances other than the acids and alkalis specified in recital 3, sewage pumps and heating circulation pumps. The relevant geographical market is the entire common market, since such pumps are regularly supplied and purchased in all the Member States.

(8) According to the information supplied by the notifying parties, there are some 70 water-pump manufacturers in the Community. Also, conventional cast iron pumps are increasingly being supplied from non-member countries. Within the Community there is fierce competition in prices and quality, and excess capacity. However, while there is a large number of suppliers, it must be borne in mind that KSB is the largest pump manufacturer not only in Europe, but also in the world. This firm estimates its market share in the Federal Republic of Germany and (following the acquisition of Ets Pompes Guinard) in France at over ... %, in the Benelux countries at between ... and ... % and in Italy at over ... %. It estimates its share of the Community market at around ... %.

Its market share in Italy, taken together with that of Lowara (about ... %), is around ... %. The market shares of Goulds and ITT in the Community as a whole and in the individual Member States, following the sale of Loewe Pumpenfabrik GmbH by ITT in 1988, are, according to the information provided by the parties, insignificant. Following that sale, the parties estimated their joint share of the Community market at about ... %. At the time of notification, they estimated it at ... %.

Competitors of the notifying parties have estimated the latters' market share in Germany, France and Italy as considerably higher : they consider the relevant product market to be limited to standardized water pumps to DIN 24 255 with output up to 100 $m^3/h$. Only about 15 water pump manufacturers in the Community can be considered competitors. There is no appreciable price competition between them, and the numbers and quality of pumps imported from non-member countries do not allow them to be considered a factor in competition.

From the notifying parties' submissions and the observations of competitors, it appears that, compared with the other suppliers throughout the common market, KSB has on its own a relatively strong position in the Federal Republic of Germany, France and the Benelux countries and, together with Goulds/Lowara, also in Italy.

E. **The notified agreements**

(9) As mentioned in recital 1, the agreement of 5 November 1985 on the setting up of a joint venture was superseded by two agreements concluded on 22 July 1987, namely:

— the agreement for joint research, development and production (joint agreement),

— the production agreement.

Whereas originally the joint venture was intended to direct research and development work and the production of the chrome nickel steel units, the participants now coordinate their cooperation without such a mechanism.

Under the new agreements, they remain owners of patents and know-how and of the special tooling required for the production of units intended for them (joint agreement, definition of product technology and process technology and Section 3.6; production agreement, point E of the preamble and Sections 1.4 and 1.6). These units are manufactured for the participants exclusively by Lowara. No provision is made for the granting of licences to third parties.

Cooperation in research and development continues in the form described in recital 4. The term of the agreements, originally 10 years starting on 5 November 1985, was extended by two years.

According to the agreements, in addition to the resolution of technical problems, a second objective of the cooperation is the achievement of profitability. This depends on the production of a minimum volume of units (see point E of the preamble and the definitions (f.11) of the joint agreement). It is thereby stated that neither KSB nor Lowara alone could be expected to attain the necessary volume of sales. It also stressed (point H of the preamble) that Goulds and ITT as pump manufacturers have a substantial interest in the technology already developed, and desire to cooperate with Lowara and KSB and with one another to complete the project through contributions of capital, marketing, know-how, design, development and testing.

The two agreements contain the following provisions:

(10) *The Joint Agreement*

— The agreement is for an initial term of 10 years from 22 July 1987. It may be terminated at the end of this period, or thereafter, at 12 months' written notice (Section 1.4).

— The aim and purpose of the agreement is the research, design, development and testing of the wet end components of pumps, the acquisition of patents in connection therewith and the provision of the tooling necessary for their manufacture. Such components are to be sold exclusively to the cooperating parties (Section 1.2).

— Work on the project is decided by the parties at joint meetings, but undertaken individually, so that the research or development tasks will be carried out and the tooling required purchased by each party in its own name and on its own behalf (Sections 2.1 and 3.5).

— The manufacture of the units is carried out by Lowara to the specifications of each participant on the basis of individual contracts governed by the general conditions laid down in the production agreement. The participants then use the units as components of their own pumps to be sold under their own trade mark.

— The intellectual property rights to developments are owned by the developing participant; upon termination of the agreement or withdrawal therefrom, each participant will have a perpetual royalty-free, non-exclusive licence to use any such intellectual property (Sections 3.1 and 3.6).

— Each participant has the right to withdraw from the agreement for good cause. The withdrawing participant will then be entitled to retain on a confidential basis all information required to promote, advertise, apply and sell the product (product technology) and a perpetual, royalty-free, non-exclusive licence to utilize the technical know-how in the widest sense (process technology). However, the withdrawing participant will not have the right to sublicense any of the technology. The withdrawing participant is also subject to trade secrecy and may incorporate the components only into pumps bearing its own trade mark. Subject to these conditions it may, however, have the wet end components manufactured by a sub-contractor (Article V).

— During the term of the agreement, such product technology as is not normally published for commercial purposes must be treated as confidential. The process technology is to be treated as a trade secret and is subject to detailed strict confidentiality rules applying for five years after termination of the Agreement (Section 6.4 (c) (5)).

For the purposes of maintaining confidentiality, a single original of the whole process technology is circulated to all of the partners, for correction and completion. This original is then deposited in a bank safe deposit. The key to this safe deposit box is held in trust by an independent selected third party (the 'Third Party').

The same procedure is followed for changes to the process technology. The Third Party may allow a participant access to the deposited process technology only following a consultation procedure.

The obligation to maintain secrecy must be observed by any manufacturing subcontractor (Article VI).

— The participants agree not to exchange any information that would endanger their independent competitive position other than within the scope of the agreement, and to comply with all laws to which they are subject (Article VII).

— Rights, duties and interests under the agreement may be assigned only with the written consent of all the other participants.

— Disputes between the participants which cannot be settled by negotiation are to be referred to arbitration conducted pursuant to the Rules of the Chamber of Commerce in Geneva. Any award made shall be binding (Article VIII).

— Upon termination of the agreement, all the participants shall receive a complete copy of all the know-how and shall have perpetual, royalty-free, non-exclusive licences. Lowara will on request manufacture spare parts for a further period of two years (Article X).

(11) *The production agreement*

— Lowara agrees, at its sole cost, to establish and maintain sufficient capacity for the production of the wet end units, as defined in Section 1.2 (Section 2.3).

— Lowara is the sole manufacturer of such components (Section 9), and undertakes to manufacture the products and the tooling necessary for their manufacture exclusively for the parties to the agreement.

— Lowara concludes individual contracts with the participants on the terms and conditions laid down in the agreement with regard to pricing (Section 3) and deliveries and guarantees (Section 4), whereby it is stressed that all participants have access to the product on an equal basis.

— Lowara agrees to keep separate all tooling furnished by the participants and to maintain it in repair (Section 7 and point E of introduction).

— The obligation to maintain confidentiality is similar to that laid down in the joint agreement (Section 8).

— The production agreement is for a term of 10 years, starting on 1 January 1988. In contrast to the joint agreement, it may be terminated at the end of that period only at 18 months' notice. Thereafter however, like the joint agreement, it may be terminated at 12 months' written notice (Section 10.1).

— Arbitration procedures, the apportionment of the know-how after termination, the assignment of rights and obligations to third parties, and the supply of replacement parts following termination are governed by terms similar to those in the joint agreement.

## F. Submission of the parties

(12) The parties maintain that their cooperation does not restrict competition, because they needed to combine in order to attain a sufficiently high volume of production. Without this association, none of them would on its own have developed these stainless steel components. For this reason the cooperation does not entail the abandonment of innovative competitiveness by the parties. The parties were never potential competitors for the wet end components of pumps. Moreover, they continue in competition with one another in respect of other pump components.

Nor is competition with other manufacturers eliminated. On the one hand, considerable competition will continue with traditional grey cast iron pumps, and on the other, it has not been established that consumers will in future actually prefer the new stainless steel pumps to the traditional cast iron pump. The introduction of the new pumps on to the market in 1988 was slow. Furthermore, it is to be expected that, if the new pumps are successful, competing manufacturers would combine to form similar associations.

The parties also consider that, if Article 85 (1) were to apply to their cooperation, the cooperation would be exempted pursuant to Article 85 (3) as falling within the scope of Commission Regulation (EEC) No 418/85 of 19 December 1984 on the application of Article 85 (3) of the Treaty to categories of research and development agreements [1], as amended by the Act of Accession of Spain and Portugal. The parties' combined market share of 19,2 % is, they argue, below the 20 % threshold laid down for competitors in Article 3 (2) of the Regulation. The cooperation was technically necessary since only Lowara had the basic technical know-how for the development of stainless steel components, but was not financially in a position to undertake such development. Finally, the parties point out that, in order to achieve the necessary

[1] OJ No L 53, 22. 2. 1985, p. 5.

volume, the new pumps have been developed for the world market, about half of which (e.g. North America, third world) uses a frequency of 60 Hz. The parties state that 60 Hz pumps pose technical requirements different from those for 50 Hz pumps. ITT and Goulds brought experience of these into the cooperation arrangement.

### G. Comments from third parties

(13) The Commission has received comments on the notified cooperation agreement, the essential content of which was published pursuant to Article 19 (3) of Regulation No 17, from five companies that are in competition with the notifying parties. They refer to the parties' market power (see recital 8) and contest the novelty of the pumps. According to them, even the chrome nickel steel technology necessary for mass-production is sufficiently well known ; each of the parties to the cooperation could have made use of that technology on its own. However, they admit that the production cost (especially the costs of tooling and machinery) would be economic only with an annual production of at least 200 000 pumps or 50 000 identical parts. They state that the problems of developing and producing chrome nickel steel parts were handled only by Lowara and KSB, and had been substantially overcome before the American parties entered the arrangement. They consider that the cooperation agreed in November 1985 is merely a fig-leaf for the parties' true purpose, which is to market chrome nickel steel pumps at the price of cast-iron pumps by virtue of mass-production and excluding any competition between them, thus securing the market for themselves. The other competitors will inevitably be driven out of the market, because the turnover of the companies that might form a rival cooperation is too small to permit an economically effective mass production. The Japanese firm Ebara will manufacture chrome nickel steel pumps on its own. Furthermore, the five competitors see no necessity for Lowara to produce the chrome nickel steel parts only for the parties to the cooperation : sales to third parties would reduce unit costs and — in contrast to the present situation — stimulate price competition. The competitors fear that when the parties to the cooperation agreement have succeeded in driving out cast-iron pumps, they will exploit the monopoly thus acquired by raising prices, to the detriment of consumers.

(14) By letter dated 5 March 1990, one of these companies, SIHI GmbH & Co KG, applied, on the basis of the arguments set out above, for interim protective measures against the cooperation and, in particular, for the imposition on the parties of an obligation to offer the wet end parts (casing and impeller) made by Lowara for standardized (DIN 24 255) water pumps of chrome nickel steel for sale to all customers, at the same prices as have been agreed for sales by Lowara to the other parties within 10 days of the adoption of the interim measures.

The Commission has also treated this application as a complaint against the cooperation. By letter of 11 April 1990, it indicated to SIHI its position on these applications and afforded SIHI the opportunity to express its views pursuant to Article 6 of Commission Regulation No 99/63/EEC [1].

The detailed arguments of the competitors are taken into account herein below.

## II. LEGAL ASSESSMENT

### A. Article 85 (1)

*Agreement between undertakings*

(15) KSB, Goulds, Lowara and ITT are undertakings within the meaning of Article 85 (1), and the joint agreement and the production agreement are agreements within the meaning of Article 85 (1).

*Restrictions of competition*

(16) The four undertakings are actual competitors. They are all manufacturers of conventional pumps having the same fields of application as the new stainless steel pumps. They are represented in the Community for these products either directly or through subsidiaries.

Contrary to their submissions, they must also be considered to be potential competitors in respect of the chrome nickel steel components of the new pumps. In view of their size, it must be assumed that each group of undertakings would have been in a financial position to develop the components alone. From the day on which the agreement on the setting up of a joint venture was concluded, 5 November 1985, Lowara was a wholly-owned subsidiary of Goulds. Nor can the position of the parties as potential competitors be contested on the basis of the argument that because Lowara alone was in possession of the basic technology, only Lowara was capable of developing the wet end components of chrome nickel steel pumps. Such basic technology was indisputably available to other pump manufacturers (for example, Grundfos, Hilge and Ebara), and, therefore, it is at least conceivable that each of the groups could have acquired the basic technology by means of a licence from manufacturers other than Lowara.

[1] OJ No 127, 20. 8. 1963, p. 2268/63.

Nor, lastly, can the existence of potential competition between the parties be ruled out on the basis of the argument that none of them would, on its own, have decided to develop the product because none, on its own, would have been able to use the volume of units necessary for cost-effective series production. Here too, other methods, such as the licensing or production for third parties, could have been used to recover the development costs over the long term. Taking account of the overall circumstances of the case, the profitability arguments put forward are not so convincing as to provide any objective evidence of the existence or non-existence of possible competition.

(17) By concluding their agreement, the undertakings have opted for cooperation on the research, development and use of wet end components for chrome nickel steel pumps, rather than proceeding independently in competition with one another. This involves a restriction of their freedom of action. Even if the other components of the pumps differ, so that the user has the choice of a number of brands, the fact remains that the new components would represent the key aspect of a user's decision to buy the new pumps.

In view of the advantages of chrome nickel steel pumps set out in recital 3 and the parties' claim that there is fierce competition on the market for water pumps, particular importance attaches precisely to competition in new products.

It must also be borne in mind that according to its own submissions, KSB alone has a market share of over ... % in the Federal Republic of Germany and France, that its position in the Benelux countries, with a market share of between ... % and ... %, is considerable, and that KSB and Lowara together have a strong position in Italy with about ... % of that market. This is all the more significant in that the competitors of KSB, in particular, are a number of considerably smaller companies.

There is only limited competition between the parties themselves. According to the information provided by the parties, Goulds and ITT do not have any significant share of the market for water pumps in the Community or in its regions. Lowara is hardly a serious competitor for KSB (other than in Italy) on those markets on which KSB has a strong position, because Lowara's position in such markets is too weak compared with KSB's. It must therefore be assumed that the new pumps will be supplied on these markets mainly by KSB.

(18) The technical lead which the parties have gained over other competitors as a result of the cooperation is safeguarded by the way they have chosen to make joint use of the process technology. Although the intellectual rights to developments are owned by each developing participant, the owner may not make free use of them. During the term of the agreement, and for five years thereafter, the process technology is covered by strict secrecy to which the parties are subject even if they withdraw from the agreement for good cause (Article V (3) (b)).

Since the production of the individual units is carried out exclusively by Lowara for the parties and since in addition no provision is made for production on behalf of third parties or for the licensing of third parties, the process technology remains restricted to the cooperating partners.

The parties' desire not to let the process technology out of their hands is also clear from the provision that any participant withdrawing for good cause may manufacture the components covered by the agreement only for its own use, and may not sublicense. The fact that third parties are prevented from having access to the process technology is a restriction of competition.

*Effect on trade*

(19) In view of the above, the two agreements may affect trade between Member States. As stated in recital 7, the area affected is the entire Community. Despite the parties' claim of difficulties in obtaining market penetration with the new pumps, it is to be assumed that, because of their technical advantages, they will, in the long term, establish their position in competition with conventional pumps. (See KSB's annual report for 1987, page 16.)

Should consumers ultimately give preference to the new generation of pumps, trade in water pumps in the Community could shift significantly in favour of the participants in the cooperation, and in particular in favour of KSB and Lowara.

B. **Article 85 (3)**

*Applicability of the block exemption*

(20) Pursuant to Commission Regulation (EEC) No 418/85 the provisions of Article 85 (1) were declared to be inapplicable to certain categories subject to the provisions set out in the Regulation.

The Commission first examined whether the accession of Goulds and ITT to the cooperation initiated by KSB and Lowara constitutes cooperation in the field of research and development at all, or merely represents utilization of the results of the research carried out by KSB and Lowara, and whether, for that reason alone, the block exemption does not apply. The parties themselves have consistently stated that their cooperation was necessary for commercial reasons in order to attain a minimum volume for the new units. This is a problem of exploitation.

On the other hand, the applicants have pointed out, as stated in recital 4, that, following their association in 1985, serious research and development work has taken place in which Goulds and ITT have been actively involved. As Goulds has been the sole owner of Lowara since the association arrangement was initiated, and as research carried out by a subsidiary may be attributed to the parent company, particular attention had to be paid to the participation of ITT. The Commission takes the view that ITT's contribution goes beyond adapting the results of the research and development to the requirements of its own production. Its contribution is summarized in recital 4.

Following publication pursuant to Article 19 (3) of Regulation No 17, it has been contested that there has been any real research and development in respect of chrome nickel steel components and, in any event, that Goulds and ITT took part in it.

Pursuant to Article 1 (1) (a) of Regulation (EEC) No 418/85, the block exemption applies to 'joint research and development of products or processes'. This notion is defined so widely in Article 1 (2) (a) that the activities of the parties fall within it. They have developed to the stage of readiness for mass production a chrome nickel steel pump that, even according to the competitors' submissions, is apt to replace the technically inferior cast-iron standardized water pumps (DIN 24 255). According to the uncontested submissions of the notifying parties, the chrome nickel steel components are light in weight and so made that the thinnest possible casing will withstand the highest possible pressure. To achieve this, all the parties have developed technical knowledge within the meaning of Article 1 (2) (e), namely that 'which is either protected by a property right or is secret (know-how)'. Pursuant to an application dated 9 May 1986, the European Patent Office granted European Patent No 259 313 to KSB and Lowara on 1 January 1989, for a centrifugal pump casing. No objection was made to the grant. As noted in recital 4, ITT and Goulds have also taken part in the design of, *inter alia,* casings and impellers.

Moreover, KSB received the second prize in the Düsseldorf Steel Centre Steel Innovation Prize 89 for its multi-media pumps, for outstanding innovative performance in function, economy, design, aesthetics and ergonomics. All of this leads to the conclusion that these are results that contribute substantially to technical or economic progress within the meaning of Article 2 (d) of Regulation (EEC) No 418/85.

The technical cooperation on research and development is continuing. ITT's contribution continues to relate to the same group of problems, but is now focused on block II pumps, in respect of which either the nominal diameter of the discharge connection, or that of the impeller, or of both, are larger than the corresponding nominal diameters of the first series (block I), the development work on which has been completed. The block II pumps pose particular problems because of their larger diameters and the associated higher performances.

Furthermore, ITT and Goulds made clear their desire to participate in the research and development work in point F of the preamble to the joint venture agreement concluded in 1985 and again in point H of the preamble to the joint agreement concluded on 22 July 1987.

The Commission therefore takes the view that joint research by all the parties was intended, took place and is still taking place.

(21) The research and development work on the block I and II pumps is work carried out within the framework of a programme as required in Article 2 (a) of Regulation (EEC) No 418/85.

The research and development work on block II pumps is based on the results for the smaller nominal diameter block I pumps, whose development was almost completed when the two agreements under consideration were notified. Section 1.4 of Article I of the joint agreement establishes the connection with the research programme laid down in the joint venture agreement as follows:

> 'This agreement shall commence on the effective date and shall continue for an initial term of 10 years (but shall also cover, retroactively, the activities of the participants with respect to the project which began on or about August 16, 1985) ...'

When notifying their cooperation on 5 July 1987, i.e. before the conclusion of the two new agreements, the parties stated that what was involved was merely a change in the legal form of the cooperation, but that nothing was being changed in the cooperation itself. The manufacture of the block I pumps is therefore to be regarded as joint exploitation of the results of joint research and development within the meaning of Article 1 (b) of Regulation (EEC) No 418/85.

(22) The Commission also examined the possibilities that the block exemption does not apply pursuant to Article 6 (g), because '... the parties to the agreement are prohibited from allowing third parties to manufacture the contract products or apply the contract processes in the absence of joint manufacture.'

The agreements provide that Lowara will manufacture the products exclusively for the parties to the agreement. Third parties therefore do not have any access to the new technology. Although the machine tools are the property of the participants for which the individual units are manufactured, manufacture does not take place on a separate basis, because the production agreement gives a single manufacturer the task of producing for all the other participants. The separate ownership of the tooling should rather be seen as a new form of financing such items, after the joint venture which would assume such financing was abandoned.

Accordingly, this arrangement is in line with Article 1 (3) of Regulation (EEC) No 418/85, under which the exploitation of the results is carried out jointly where the work involved is allocated between the parties by way of specialization in production. It is also in line with Article 4 (1) (c), under which exemption is also extended to any obligation on the parties to procure the contract products exclusively from the party jointly charged with their manufacture.

(23) The parties themselves have invoked Article 3 (2) of Regulation (EEC) No 418/85, under which the block exemption applies in the case of competitors '... only if, at the time the agreement is entered into, the parties' combined production of the products capable of being improved or replaced by the contract products does not exceed 20 % of the market for such products in the common market or a substantial part thereof'. When the agreement was concluded, on 22 July 1987, the applicants' estimated market share was ... %. The sale of the ITT subsidiary Loewe Pumpenfabrik GmbH, Lüneburg, to Grundfos took place only in the spring of 1988, i.e. after the agreement had been concluded. However, even if it is assumed that the sale reduced the market share by ... %, it must be borne in mind that the market share figures are estimates. The applicants themselves drew attention, in their written communication of 5 June 1987, to the uncertainties involved here. In particular, the market share could be higher than assumed in Member States other than Germany. In addition, the competitors estimate the parties' market share to be substantially higher, albeit on the basis of a narrower market definition.

(24) Because of these uncertainties, it cannot be ruled out that the combined share of the participants on the market for water pumps in the Community is over 20 %. As stated in recital 8, KSB alone exceeds this share in the Federal Republic and in France and, together with Lowara, in Italy.

It is also possible that KSB's market shares will rise, at least in the long term, as a result of the increase in turnover which it hopes to achieve through the multi-media pump. Accordingly, there are doubts as to the applicability of Regulation (EEC) No 418/85 which indicate that it would be appropriate to assess the cooperation between the participants as an individual case, assessing the cooperation against the requirements of Article 85 (3) directly.

(25) The examination of the two notified agreements in the context of Article 85 (3) has led to the following conclusions.

*Improvement in the production of goods and promotion of technical progress*

(26) As stated in recitals 3 and 19, the new pump has significant advantages over conventional water pumps resulting from the material (chrome nickel steel) used for the wet end components and, in particular, from their construction. The pumps will also be made with capacity in the higher range up to 240 $m^3/h$, by mass production and with savings on materials (light-weight construction). Given these advantages, the cooperation in developing the new pump contributes to improving the production of goods and to promoting technical progress. In the present case, which also concerns joint exploitation, it is to be noted that under Article 85 (3) a mere contribution to the promotion of technical or economic progress is required, whereas under Article 2 (d) of Regulation (EEC) No 418/85, this contribution must be substantial. According to the explanation given in recital 20, the former, less demanding condition, is in any event fulfilled.

*Share of consumers in the benefit resulting from the agreements*

(27) The advantages arising from the cooperation benefit consumers at the very least through the improvement in the quality of water pumps. Moreover, two aspects of the new pumps, i.e. energy conservation and the fact that the fluids handled by the pump are not polluted, are environmentally beneficial. This effect is reinforced by the higher performance capacity of the pumps. This constitutes an improvement in operating characteristics. At least at present, a further advantage is that these pumps are offered to consumers at the same price as cast-iron pumps.

*Indispensability of the agreements to the attainment of these objectives*

Need for the cooperation

(28) Apart from the technical arguments, the parties have justified the need for the cooperation mainly on the grounds that the development costs could be justified economically only if a minimum production of units is obtained. The extension of the original cooperation between KSB and Lowara to include Goulds and ITT is attributed to the fact that partners were being sought who were experienced in that part of the world market which uses 60 Hz frequencies (e.g. North America and many third world countries).

(29) The Commission can leave open the question of whether the research capacity of KSB and Lowara on their own would not have been sufficient to solve within a reasonable period of time the problems which have been or are now being solved with the help of ITT and Goulds, since the information submitted indicates that the inclusion of the two undertakings in the cooperation made economic sense, *inter alia* because without it further development of the pumps would not have been worthwhile. The total costs for research and development and for the manufacturing facilities for the new pumps may be estimated at some DM ... to ... million. This is equivalent to about ... of KSB's annual turnover of all pumps falling within the market definition, such annual turnover accounting for some ... % of its 1987 consolidated aggregate turnover. In the case of Lowara, DM ... million would be equivalent to approximately ... of its consolidated aggregate turnover in 1987, with the average turnover of pumps falling within the market definition in the period 1985 to 1988 accounting, according to the information provided by Lowara, to only some ... % of such aggregate turnover. Apart from the fact that the new pumps had to be comparable in quality with conventional pumps in order to be acceptable to users, the prices fixed for them had to be competitive with those for conventional pumps. This seemed feasible only if they were manufactured on a sufficiently large scale.

According to the information provided by the parties, the new pumps are only partially substitutes for the pumps falling within the market definition.

Given this situation, it was logical that KSB and Lowara should take the view that the expected research and development costs could be recovered only with a high minimum volume of units, put, in the joint agreement, at 150 000 to 180 000 pumps a year. Moreover, the competitors are also of the opinion that the production costs can be recovered only with an annual production of 200 000 pumps or 50 000 identical parts. According to its own figures, KSB was able to sell in the period 1985 to 1988 an annual average of only some ... pumps falling within the market definition. Lowara was not able to provide any figures on the number of units sold, but the value of the average sales of such pumps in the period 1985 to 1988 amounted to only some ... % of KSB's turnover. The Commission therefore gives credence to the assurances of KSB and Lowara that they together would not have pursued the development of wet end components as far as readiness for production, because the financial risk was too great. Thus, without the extension of the cooperation, the chrome nickel steel pump would not have reached the market.

The fact that a not inconsiderable economic risk was involved is now evident following the introduction of the block I pumps on to the market, which is proceeding more hesitantly than the parties had hoped. It must therefore be assumed that, as the market leader tried to spread the risk associated with the investment among several participants, most other undertakings would have done exactly the same. Consequently, at least during an appropriate introductory period, it is understandable that KSB and Lowara preferred cooperation with Goulds and ITT to other arrangements, despite the abovementioned effects on competition. The arrangement they opted for has the advantage of combining the benefits of technical cooperation in reseach and development and an assured volume of the wet end components.

In view of the above, the Commission considers that the cooperation between the participants in the development of the new pump was indispensable.

Duration of the cooperation

(30) In assessing the term of the agreements, namely 10 years starting on 22 July 1987 in the case of the joint agreement and 10 years starting on 1 January 1988 in the case of the production agreement, account must be taken of the fact that work on the block I pumps has, in the meantime, been completed. These pumps are now mostly being marketed. Of the block II pumps, three sizes have been developed and were put on the market in May 1989. It is planned to market six more sizes in March 1990 and the beginning of 1991. The research and development work for the last three sizes has recently been again postponed. In the case of the block I pumps, therefore, the cooperation involves joint exploitation, while in the case of the block II pumps it still involves joint research and development, which, however, will shortly be completed except for the last three sizes.

(31) Pursuant to Article 3 (1) of Regulation (EEC) No 418/85, the exemption afforded by Article 1 of that Regulation lasts for the duration of the research and development programme, and, if there is joint exploitation, for five years thereafter, when the cooperating parties are not competitors, If the parties are competitors, which is the case here, such exemption is only afforded, according to Article 3 (2), if, at the time of entering into the agreement, the combined share of the parties did not exceed 20 % of the common market or a substantial part of it. Article 3 (3) extends such an exemption after five years only if the parties combined share remains under 20 %.

(32) In examining this as a case of individual exemption, and in considering its obligation pursuant to Article 8 (1) of Regulation No 17 to specify the duration of any exemption, the Commission does not see any reason to depart from the period provided for in Regulation (EEC) No 418/85.

According to the information provided by the parties, the block I pumps were first put on the market within the common market by KSB in the spring of 1988. The Commission assumes that this occurrend by 1 June 1988. It appears appropriate to apply the five-year exemption period specified in Article 3 (2) in conjunction with Article 3 (1) of Regulation (EEC) No 418/85 for the joint exploitation of results from them. This would mean an exemption until 31 May 1993.

(33) No elimination of competition

At present, the agreements do not afford the possibility of eliminating competition in respect of a substantial part of the products in question. In particular, the new pumps must first be put on the market, where they face competition from the other suppliers of conventional pumps. Since the introduction of the new pumps on to the market is more hesitant than anticipated, it cannot yet be determined whether and to what extent the new water pumps will gain acceptance in preference to conventional ones. Consequently, the fears expressed by the competitors appear to be unsubstantiated, at least for the time being.

C. **Article 8 of Regulation No 17**

(34) Account must be taken of the facts that, according to their own estimates, the parties' market share in the Community is close to the threshold provided for the application of the block exemption, and that competitors estimate this market share to be considerably higher. This is, therefore, a borderline case on which the Commission is taking an individual decision. The Commission's misgivings are based on the fact that KSB, the largest pump manufacturer in the world, has a strong market position in the central Member States of the Community. In view of this position, together with the fact that, of the two American parties, Goulds distributes the new pumps only through Lowara, and ITT not at all on the European market, and that lowara is economically relatively insignificant compared to KSB, it cannot be ruled out that successful marketing of the pumps will in future have a decisive influence on the structure of the relevant European market. The continuing research and development work on the block II pumps will probably be completed soon. The danger of structural changes in the market is reinforced by the fact that third parties have no access to the participants' know-how during the cooperation period.

(35) On the other hand, all the participants have drawn attention to the slow penetration of the product in the market. However, it is evident from the figures submitted that greater consumer resistance is being encountered in the United States than in Europe, and that KSB has been somewhat more successful in Europe. In view of these circumstances, the Commission must monitor the situation to see whether any possible change in market structures has an effect such that the Commission should review its individual exemption decision.

It therefore appears appropriate to require the parties, pursuant to Article 8 (1) of Regulation No 17, to submit a report on how the cooperation is developing, containing the following information :

— a description of the technical progress of the cooperation,

— the annual turnover achieved in the individual Member States in the pumps falling within the market definition set out in recital 7 and that achieved in the new types of pumps. The respective total volume of the market for the pumps falling within the market definition should also be given. The information on annual turnover and on market volume are to indicate values in ecus and numbers of units.

The reports should be presented at the end of March, 1991 and 1993.

*Indispensability of joint exploitation*

(36) The Commission has accepted the principle of joint exploitation over a limited period of the results of research and development (see the ninth recital in the preamble) to Regulation (EEC) No 418/85). In view of the observations submitted by competitors, however, the Commission has reason to believe that the joint exploitation in this case, which precludes any availability to competitors of the wet end components made by Lowara, is apt to reinforce the already strong position in the common market of the parties, especially KSB. So far as can be foreseen the joint exploitation of the results cannot be considered indispensable beyond the expiry of the exemption, if the exclusivity of manufacture and sale remains reserved to the parties to the cooperation agreement,

HAS ADOPTED THIS DECISION:

*Article 1*

Article 85 (1) of the Treaty is hereby declared inapplicable, for the period 22 July 1987 to 31 May 1993, to the agreements concluded between KSB Aktiengesellschaft, ITT Industries, Goulds Pumps Inc. and Lowara SpA.

*Article 2*

Each of the four undertakings shall at the end of March, 1991 and 1993, submit a report on the development of the cooperation containing the information set out in recital 35 of this Decision.

*Article 3*

This Decision is addressed to

1. KSB AG,
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2. Goulds Pumps Inc.,
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3. Lowara SpA,
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4. ITT Corporation,
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Done at Brussels, 12 December 1990.

*For the Commission*

Leon BRITTAN

*Vice-President*