

## II

*(Acts whose publication is not obligatory)*

## COMMISSION

## COMMISSION DECISION

of 11 October 1988

relating to a proceeding under Article 85 of the EEC Treaty

(IV/32.368 — BBC Brown Boveri)

(Only the German text is authentic)

(88/541/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 <sup>(1)</sup>, as last amended by the Act of Accession of Spain and Portugal, and in particular Articles 4, 6 and 8 thereof,

Having regard to the notification submitted on 17 June 1987 by BBC Brown Boveri Aktiengesellschaft, Mannheim, Federal Republic of Germany, concerning a set of cooperation agreements with the Japanese company NGK Insulators Ltd, Nagoya,

Having regard to the summary of the notification <sup>(2)</sup> published pursuant to Article 19 (3) of Regulation No 17,

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

Whereas :

## I. THE FACTS

## A. The subject matter of the notification

- (1) On 17 June 1987 the electrical engineering company BBC Brown Boveri Aktiengesellschaft,

Mannheim <sup>(3)</sup>, notified a set of cooperation agreements with the Japanese company NGK Insulators Ltd, Nagoya, an internationally known manufacturer of technical precision ceramics.

- (2) The cooperation relates to the development of sodium-sulphur — high-performance — batteries intended primarily for use in electrically driven vehicles. The batteries are also intended for storing off-peak electricity for use during peak-load periods in national grid systems.
- (3) Currently, lead-acid batteries are used which store relatively little energy per kilogram of battery. Large battery manufacturers and other firms are working on the development of batteries with more efficient energy storage.
- BBC has been developing since 1972 a sodium-sulphur battery which can store four times as much electrical energy as a lead-acid battery. High-capacity batteries are however still at the development stage and, other than NiFe batteries developed and sold by a French firm, not yet on the market. No real market therefore exists up to now for high-performance batteries.
- (4) Under the cooperation arrangement, a joint venture, NEWCO, in which NGK has a 60 % stake and BBC a 40 % stake, has been set up in Japan to develop the sodium-sulphur battery. BBC has brought the development of the sodium-sulphur battery to a highly advanced stage. The

<sup>(1)</sup> OJ No 13, 21. 2. 1962, p. 204/62.

<sup>(2)</sup> OJ No C 72, 18. 3. 1988, p. 4.

<sup>(3)</sup> Because of the merger of the Swiss parent company BBC Brown Boveri AG with the Swedish company Asea AB the name of the company is, since 13 June 1988, 'Asea Brown Boveri Aktiengesellschaft' (ABB).

battery developed by BBC incorporates ceramic tubes. The problems inherent in the mass production of these ceramic parts have not yet been satisfactorily solved. Cooperation with the experienced ceramics manufacturer NGK should reduce the cost of and speed up the development of mass production, which accounts for a large part of the battery development costs. The scope for the two partners' own research and development in the field of sodium-sulphur batteries is not affected and BBC will continue its development work regardless of the activity of the joint venture. The results of each partner's own research must be made available to the other partner through the joint venture, and new technical knowledge gained through the joint venture is passed on to the parent companies for them to use. No production within the joint venture is planned; on the contrary, each partner will set up its own mass-production facilities and market the product in competition with other battery manufacturers.

- (5) As a ceramics manufacturer without technical knowledge in the field of batteries, NGK has not, as yet, carried out any development activity with regard to the manufacture of batteries. The access to the technology of NEWCO and of BBC will however enable it also to manufacture sodium-sulphur batteries and thus to become a potential competitor of BBC.

#### B. Cooperation agreements

- (6) The following set of agreements, which form an economic whole, has been concluded under the cooperation arrangements:

*Joint venture agreement between BBC and NGK on the setting-up of the joint venture company NEWCO in Japan*

- (7) The business of NEWCO is research and development relating to sodium-sulphur batteries up to the manufacturing stage. So that NEWCO can perform this task, BBC and NGK undertake to grant it an exclusive licence for their complementary technical knowledge.

Since NEWCO will not itself manufacture and market the battery developed by it, this being the preserve of the parent companies, it grants BBC an exclusive licence to use its technology for the manufacture and sale of the product in the Community, North America and a number of other countries. At the same time, it grants NGK a similar licence for Japan and other countries in the Far East. NEWCO's technology consists of the technology provided to it by both BBC and NGK and of the results of its own research and development. BBC's and NGK's allotted territories include the major countries of the world.

NEWCO and NGK undertake not to carry out any joint research and development with third parties in the field of sodium-sulphur batteries without BBC's consent.

#### *Technical licence agreement between BBC and NEWCO*

- (8) (a) Pursuant to its undertaking given in the abovementioned joint venture agreement, BBC grants NEWCO an exclusive licence to use its technology. NEWCO, which will not itself either manufacture or market the product, is granted a licence, in view of the transmission of technical knowledge to NGK, for the manufacture and sale of the product in Japan and other countries of the Far East. BBC's technology covers (...) <sup>(1)</sup> patents granted in the Community, notably in the Federal Republic of Germany and to some extent in Belgium, France, Italy, the Netherlands, Spain and the United Kingdom, and (...) in Japan, supported by substantial know-how. BBC is obliged to communicate to NEWCO any new technical knowledge it acquires during the currency of the agreement.

NEWCO, which is obliged to pay BBC an entry fee of DM (...) plus licence fees, is authorized to grant an exclusive sub-licence to NGK for the abovementioned territory, and to authorize NGK to grant a sub-licence to a third party in this territory. The granting of a sub-licence to NGK and to third parties is subject to the prior consent of BBC, which cannot refuse it without reasonable grounds.

- (9) (b) NEWCO is obliged for the period of the agreement to transfer its technology to BBC free of charge for the manufacture and sale of the product in the Community, North America and a number of other countries. NEWCO's technology includes such NGK technology as is made available to NEWCO under the licensing agreement between NGK and NEWCO and the results of NEWCO's research and development.

BBC is authorized to grant to the Canadian company Powerplex Technologies Inc., the joint venture of BBC and the Canadian company Magna International Inc., a sub-licence for the manufacture and marketing of products under contract in Canada, Mexico and the USA.

<sup>(1)</sup> In the published version of this Decision, some figures have hereinafter been omitted, pursuant to the provisions of Article 21 of Regulation No 17 concerning non-disclosure of business secrets.

*Technical licence agreement between NGK and NEWCO*

- (10) (a) Pursuant to its undertaking given in the abovementioned joint venture agreement, NGK grants NEWCO an exclusive licence to use its technology. NEWCO, which will not itself either manufacture or market the product, is granted a licence in view of the transmission of technical knowledge to BBC for the manufacture and sale of the product in the Community, North America and a number of other countries. The technology of NGK, which is not entitled to charge a licence fee for the transfer of its technology to NEWCO, consists solely of know-how in the field of special ceramics.
- (11) (b) NEWCO grants NGK an exclusive licence to use its technology for the manufacture and sale of the product in Japan and other countries in the Far East.

NEWCO's technology includes such BBC technology as is provided to NEWCO under the licence agreement between BBC and NEWCO, and for the period thereof, and the results of NEWCO's own research and development.

NGK is obliged to defray NEWCO's costs, including the entry fee paid to BBC, and to pay licence fees to it.

- (12) (c) NGK and NEWCO are authorized to grant sub-licences to third parties for their respective contractual territories, and NEWCO is entitled to authorize BBC to grant a sub-licence for its contractual territory. The granting of sub-licences is subject to the prior consent of the other partner, which cannot refuse it without reasonable grounds.

*Common provisions of the agreements referred to above*

- (13) Each partner is prohibited from making available to third parties the technology provided to it by the other partner without its consent. This prohibition applies for a further period of five years after the expiry of the agreements.

The joint venture is set up for an indeterminate period. The licensing agreements have a term of 15 years starting from the time when the cooperation

comes into effect. After 10 years from the time when the product is launched on the market in the Community or in Japan, NGK will have the right to sell it in the Community and BBC will have the right to sell it in Japan.

After the expiry of the agreements, each partner will be free to use all the technical knowledge communicated by the other partner in the course of the cooperation programme independently anywhere in the world without having to pay any licence fees.

*Lease and personnel service agreement between NGK and NEWCO*

- (14) NGK is obliged, throughout the duration of the abovementioned licensing agreement between NGK and NEWCO, to lease to NEWCO buildings and facilities for use as business premises and laboratories and to place its staff at NEWCO's disposal for the conduct of its business.

**C. Comments from third parties**

- (15) The Commission has not received any comments from third parties in response to publication of a summary of the notified agreements in accordance with Article 19 (3) of Regulation No 17.

**II. LEGAL ASSESSMENT**

**A. Article 85 (1)**

- (16) The cooperation agreements notified by BBC are caught by Article 85 (1) of the Treaty.
- (a) The parties are undertakings and the notified agreements are agreements between undertakings within the meaning of Article 85.
- (b) The agreements have as their object and effect a restriction of competition within the common market.
- (aa) *Obligation not to conclude agreements with third parties on research and development*

- (17) The joint venture agreement between BBC and NGK provides for joint research and development through the joint venture company NEWCO in the field of sodium-sulphur batteries (the contract product).

Under the agreement, NEWCO and NGK are obliged not to undertake with third parties any joint research and development in the field of the contract product during the execution of the programme without BBC's consent.

According to the Commission's established decision-making practice, this obligation constitutes a restriction of competition (see also Article 4 (1) (b) of Commission Regulation (EEC) No 418/85<sup>(1)</sup> on research and development agreements).

(bb) *Exclusive territorial licence for NGK*

- (18) In the licensing agreement between BBC and NEWCO, BBC grants NEWCO an exclusive licence to use its technology for the manufacture and sale of the contract product in Japan and other countries in the Far East. In the licensing agreement between NGK and NEWCO, the latter in turn grants NGK an exclusive licence to use its technology for the manufacture and sale of the contract product in Japan and other countries in the Far East.

As a result of these exclusive territorial licences, exports to the Community, which, notwithstanding the large distances involved, would have been feasible both in the case of batteries intended for use in electrically driven vehicles and in that of batteries intended for storing off-peak electricity, are prevented.

Exports of the contract product to Belgium, the Federal Republic of Germany, France, Italy, the Netherlands and the United Kingdom would be impeded by BBC's industrial property rights in those countries. However, BBC has not registered any property rights in the other Community countries except for Spain, where it has applied for the registration of (...) of its (...) patents, so that it could not prevent exports to those countries.

The exclusion of exports to those countries through the exclusive territorial licence is, in view of NGK's strength as an exporter and the fact that it is a potential compe-

tititor of BBC, an appreciable restriction of competition.

(cc) *Exclusion of third parties from the exploitation of the partners' technology*

- (19) In the licensing agreements between BBC and NEWCO and between NGK and NEWCO, the partners BBC and NGK have granted each other exclusive licences to use their complementary technical knowledge for the manufacture and sale of the contract product in the major countries of the world.

The partners have thereby reserved exploitation of their combined technical knowledge for themselves and prevented other firms having access to that knowledge.

This exclusion of competitors results in an appreciable restriction of competition.

- (20) (c) The cooperation agreements notified by BBC are also likely to affect trade between Member States.

If, as a result of the obligation contained in the joint venture agreement not to carry out any joint research and development work with third parties, NEWCO and NGK are prevented from developing sodium-sulphur batteries jointly with third parties in the Community and third parties are prevented by the exclusivity of the reciprocal licensing agreements from exploiting the partner's technology, there is no way in which such third parties can participate in intra-Community trade in the batteries.

Moreover, as a result of the export prohibition stemming from the exclusive territorial licence granted to NGK, the Community as a whole is isolated from third countries and competition within the common market and hence trade between Member States is affected. The pattern of trade between Community countries will be different from what it would have been in the absence of the export prohibition.

B. Article 85 (3)

*Need for an individual exemption*

- (21) Under the cooperation arrangement, the joint venture agreement provides for joint research and development of the contract product excluding joint exploitation of the results within the meaning of Article 1 (1) (c) of Regulation (EEC) No 418/85.

<sup>(1)</sup> OJ No L 53, 22. 2. 1985, p. 5.

This Regulation however cannot apply, by virtue of its Article 6 (f), because NGK is prohibited under the agreement from selling the products concerned or pursuing an active sales policy for them in the territories within the common market reserved for BBC, and this even after the end of the period referred to in Article 4 (1) (f) of the Regulation.

The notified agreements can therefore be exempted only if they are found to satisfy all the conditions set out in Article 85 (3).

#### *Individual exemption*

- (22) All the conditions for an individual exemption are satisfied in this case for the following reasons:

(a) Promotion of technical and economic progress

- (23) The cooperation between BBC and NGK is aimed at developing a fundamental technological innovation, which can be done more quickly and cheaply on a collaborative basis. In many countries of the world, the development of high-performance batteries is being promoted with the help of substantial public resources. The BBC sodium-sulphur battery has so far benefited from some DM 60 million in public assistance from the budget of the German Federal Ministry for Research and Technology. The authorities rightly think that high-performance batteries with a high specific energy density will play an important role both in the propulsion of electrically driven vehicles and in the storage of off-peak electricity for use during peak-load periods in national grid systems. If, through the use of high-capacity batteries, the peak loading which occurs at certain times in public power supply networks is successfully relieved, the output of the public power supply network need not be tailored to this peak load and a more economic use can be made of existing power station capacity. Dependence on oil imports from third countries will also be reduced.

The overall benefits to be derived from the use of electrically driven vehicles are even greater. An electrically driven vehicle causes no damage to the environment through harmful exhaust emissions or loud engine noise. There is therefore much to be said for the cooperation arrangement in terms of improvement of the quality of life of consumers through the development of batteries for vehicles.

(b) Benefit to consumers

- (24) The advantages of high-performance batteries will be of direct benefit to consumers. The availability of a new motor-vehicle power source is economically beneficial to the consumer, and the better use

of existing power station capacity is likely to enable electricity suppliers to reduce their charges.

(c) Indispensable nature of the restrictions

- (aa) Obligation not to conclude agreements with third parties on research and development

- (25) This obligation is exempted under Article 4 (1) (b) of block exemption Regulation (EEC) No 418/85 on research and development agreements. It is therefore regarded for the purposes of that Regulation as necessary to secure the benefits resulting from joint research and development. This can also be assumed to be so in the present case.

- (bb) Prevention of exports into the Community and prevention of third parties from exploiting the technical knowledge of the cooperation partners

- (26) BBC has been developing sodium-sulphur batteries for about the last 16 years and has so far spent DM 150 million on research and development, DM 60 million of which has, as already indicated, been contributed by Government's research budget. Development work on the BBC high-performance battery is expected to last another three to five years.

- (27) The risk involved in marketing the products is unusually high.

When combined with NGK's technology, BBC's technology constitutes a fundamental technological innovation and it will not be easy to induce the consumer, as far as batteries intended for use in electrically driven vehicles are concerned, to abandon old ways and switch to a new form of propulsion, quite apart from the fact that at first there will be only limited charging facilities or availability of exchange units together with the necessary back-up services. Similar resistance will be encountered in the motor industry. If the product is to sell, there will therefore have to be a radical change in consumer habits.

- (28) It is therefore apparent that, after spending an exceptionally large amount on research and development, BBC runs an unusually high risk of failure at the marketing stage. If it were exposed in the common market to competition from NGK and other licensees, the likelihood of its recovering its costs would be impaired.

- (29) In the light of the above, the protection of BBC from supplies by NGK and other licensees into its own allotted territory seems to be indispensable to implementation of the cooperation arrangement.



- (30) The period during which BBC is protected against exports by NGK is 10 years. After 10 years, starting from the launch of the contract product on the market within the Community, NGK will have the right to sell it in the Community. This period of protection is no more than is necessary.

The cost of introducing the product onto the market will be very high. Electric vehicles have to compete with conventional vehicles and it will not be easy to induce consumers to change their habits and switch to a new form of propulsion. Similar resistance will have to be overcome in the motor industry. To start with, therefore, only relatively small quantities will be produced at a correspondingly high unit cost. During this introductory phase, which can be expected to last at least five years, BBC will not be able to charge economic prices because this would make it more difficult to gain acceptance for the new form of propulsion. At best, a return on the investment undertaken in the past can be expected during the latter half of the 10-year period. A period of less than 10 years would be over before BBC had opened up the market for the product in the Community.

- (31) The duration of the protection granted to BBC through the reciprocal exclusive licences against supplies by other licensees into its allotted territory is 15 years. It must be borne in mind, however, that it will probably be as much as a further five years after the grant of a licence to a third party before the development of the batteries is completed, series production gets under way and selling the product becomes possible. Only then can the protection granted by the exclusivity take effect so that the duration of the protection is in fact reduced to 10 years.

- (32) The protection granted to BBC is therefore indispensable.

(d) Continued competition from rival manufacturers

- (33) The restriction of intra-brand competition in the present case does not result in the elimination of competition in respect of a substantial part of the product in question.

A number of competitors are also developing high-performance batteries to power electric cars and store off-peak electricity, using the sodium-sulphur principle or other techniques. Electrically driven vehicles compete, moreover, with conventional vehicles, so there is effective competition from other manufacturers which BBC cannot ignore.

### C. Article 8 of Regulation No 17

- (34) Pursuant to Article 8 (1) of Regulation No 17, exemption is for a specified period.

The cooperation arrangement is based essentially on the exploitation and further development of technical knowledge exchanged under licensing agreements. It is therefore appropriate to grant the exemption for the duration of the licensing agreements concerned, that is to say 15 years, starting from the entry into force of the cooperation agreements on 20 November 1987,

HAS ADOPTED THIS DECISION:

#### Article 1

Pursuant to Article 85 (3) of the EEC Treaty, the provisions of Article 85 (1) are hereby declared inapplicable to the following cooperation agreements notified by the undertaking referred to in Article 3:

- the joint venture agreement between BBC Brown Boveri Aktiengesellschaft and NGK Insulators Ltd,
- the technical licence agreement between BBC Brown Boveri Aktiengesellschaft and NEWCO,
- the technical licence agreement between NGK Insulators Ltd and NEWCO,
- the lease and personnel service agreement between NGK Insulators Ltd and NEWCO.

#### Article 2

The exemption shall be valid from 20 November 1987 to 19 November 2002.

#### Article 3

This Decision is addressed to BBC Brown Boveri Aktiengesellschaft, Mannheim, Federal Republic of Germany.

Done at Brussels, 11 October 1988.

*For the Commission*

Peter SUTHERLAND

*Member of the Commission*