



Ottawa, Monday, February 21, 2000

Appeal Nos. AP-97-124 and AP-97-125

IN THE MATTER OF appeals heard on April 13, 1999, under section 67 of the *Customs Act*, R.S.C. 1985 (2d Supp.), c. 1;

AND IN THE MATTER OF decisions of the Deputy Minister of National Revenue dated November 7 and December 5 and 12, 1997, with respect to requests for re-determination under section 63 of the *Customs Act*.

BETWEEN

ASEA BROWN BOVERI INC.

Appellant

AND

THE DEPUTY MINISTER OF NATIONAL REVENUE

Respondent

DECISION OF THE TRIBUNAL

The appeals are dismissed.

Pierre Gosselin
Pierre Gosselin
Presiding Member

Raynald Guay
Raynald Guay
Member

Peter F. Thalheimer
Peter F. Thalheimer
Member

Michel P. Granger
Michel P. Granger
Secretary

UNOFFICIAL SUMMARY

Appeal Nos. AP-97-124 and AP-97-125

ASEA BROWN BOVERI INC.

Appellant

and

THE DEPUTY MINISTER OF NATIONAL REVENUE

Respondent

These are appeals under section 67 of the *Customs Act* from decisions of the Deputy Minister of National Revenue (now the Commissioner of the Canada Customs and Revenue Agency) made under section 63 of the *Customs Act*. The issue in these appeals is whether certain distribution transformers, > 500 KVA, < 500 KVA and > 650 KVA, and certain dry-type power transformers qualify for duty relief under Code 2101 as articles for use in the goods of tariff item No. 9032.89.20.

HELD: The appeals are dismissed. It is the Tribunal's view that the transformers in issue do not qualify for duty relief under Code 2101 as goods for use in process control apparatus of tariff item No. 9032.89.20. The goods in issue are passive devices which simply sit on the distribution line and step down the voltage to preset levels appropriate for distribution to retail customers. The goods in issue cannot vary the preset level automatically, and they do not react or respond to any direction from process control apparatus. As the goods in issue do not have an active role in carrying out directions from process control apparatus, it is the Tribunal's view that they are not functionally joined to that apparatus.

Place of Hearing:	Ottawa, Ontario
Date of Hearing:	April 13, 1999
Date of Decision:	February 21, 2000
Tribunal Members:	Pierre Gosselin, Presiding Member Raynald Guay, Member Peter F. Thalheimer, Member
Counsel for the Tribunal:	Tamra Alexander Marie-France Dagenais Gerry Stobo
Clerk of the Tribunal:	Anne Turcotte
Appearances:	Peter E. Kirby and Michael Sherbo, for the appellant Stéphane Lilkoff, for the respondent

Appeal Nos. AP-97-124 and AP-97-125

ASEA BROWN BOVERI INC.

Appellant

and

THE DEPUTY MINISTER OF NATIONAL REVENUE

Respondent

TRIBUNAL: PIERRE GOSSELIN, Presiding Member
RAYNALD GUAY, Member
PETER F. THALHEIMER, Member

REASONS FOR DECISION

These are two appeals under section 67 of the *Customs Act*¹ from decisions of the Deputy Minister of National Revenue (now the Commissioner of the Canada Customs and Revenue Agency) made under section 63 of the Act on November 7 and December 5 and 12, 1997. The issue in these appeals is whether certain distribution transformers, > 500 KVA, < 500 KVA and > 650 KVA, and certain dry-type power transformers qualify for duty relief under Code 2101 of Schedule II to the *Customs Tariff*² as articles for use in the goods of tariff item No. 9032.89.20 of Schedule I to the *Customs Tariff*. The relevant tariff code reads as follows:

Articles (other than goods of the tariff item Nos. enumerated below) for use in:

2101 The goods of tariff item No.: . . . 9032.89.20.

Tariff item No. 9032.89.20 reads as follows:

90.32 Automatic regulating or controlling instruments and apparatus.

9032.89 --Other

9032.89.20 ---Process control apparatus, excluding sensors, which converts analog signals from or to digital signals

EVIDENCE

Prior to proceeding with the witnesses' testimony in these appeals, the parties agreed to include on the record of these proceedings the witnesses' testimony in Appeal Nos. AP-97-123, AP-97-137 and AP-98-001. Mr. Jean-Pierre Haché, Marketing Manager, Asea Brown Boveri Inc., testified on behalf of the appellant. Mr. Haché is an engineer and was qualified as an expert in the field of power engineering to give opinion evidence on issues of process control. In Appeal Nos. AP-97-123 and AP-97-137, Mr. Haché testified that the generation, transmission and distribution of electricity is a process. He stated that equipment that measures, interprets a measurement or reacts to an event has a direct impact on regulating and controlling the process and is, therefore, part of process control. Mr. Haché testified that control occurs, first, at the local or substation level. If a line fails, the protection equipment takes action, either trips a breaker or opens a circuit, and, at the same time, sends a signal to the regional control. At the regional level, decisions as to how to bypass the fault are made, and circuits are opened or closed to reroute the power. Similarly, central control is alerted to the problem and, if adjustments are required across regions in order to

1. R.S.C. 1985 (2d Supp.), c. 1 [hereinafter Act].
2. R.S.C. 1985 (3d Supp.), c. 41.

address the fault, central control ensures that the appropriate action is taken. Mr. Haché stated that all three levels of control are fully interconnected and integrated.

In these proceedings, Mr. Haché testified that the goods in issue are distribution transformers and dry-type transformers. He explained that both are characterized in the electrical field as distribution transformers and that what differentiates them is that one is insulated with oil (distribution transformer) and the other is insulated with air (dry-type transformer). The distribution transformer is the round grey can that one sees on top of hydro poles. These transformers deliver power to residential areas. The dry-type transformer is typically installed indoors, for example, in a shopping mall. Both types of transformers are connected to the substation through the distribution line. The purpose of both types of transformers is to bring the voltage level down to the distribution level.

Mr. Haché testified that the goods in issue are part of the process of distributing electricity as, without them, the electricity would not be at a level that is usable by the end user. Mr. Haché explained that there are current transformers and other measuring devices located in the substation feeding the distribution line that detect an event, like the failure of a distribution transformer, on the distribution line. Protection relays in the substation send a signal to a circuit breaker in the substation which disconnects the line to which the distribution transformer is connected. Both the local control centre and the central control centre know the position of each circuit breaker.

Mr. Haché explained that, when a power transformer fails, the regional control centre bypasses the transformer and delivers the power to the same customer via a different route. Mr. Haché clarified that distribution transformers must be bypassed manually by sending a crew on site.

Mr. Réjean M. Breton, President of Breton, Banville & Associates, a consulting firm, testified on behalf of the respondent. Mr. Breton was qualified as an expert in the field of power engineering to give opinion evidence on issues of process control. In Appeal Nos. AP-97-123 and AP-97-137, Mr. Breton provided the Tribunal with a diagram of the Hydro-Québec power grid. Mr. Breton explained the various components of the grid, from generation to transmission to distribution. Mr. Breton differentiated between primary equipment, such as the generators, transformers, busbars and transmission lines, and protection and measuring equipment, such as protection relays. Mr. Breton testified that the protection and measuring equipment communicates with the control centre regarding decisions being made. Mr. Breton also stated that actuators are instruments, or equipment, that respond to a control signal and that they are not part of process control.

Mr. Breton testified that local or substation control is not part of process control. He stated that the summation of each local control is process control. He stated that process control only occurs at the regional and central levels. The distinction which Mr. Breton made between local and regional or central control is that local control only controls equipment in the close vicinity of the control room, within the substation. However, regional or central control controls many different remote locations.

In these proceedings, Mr. Breton added to Mr. Haché's description of the goods in issue by stating that each is equipped with an off-load tap changer. In Appeal Nos. AP-97-123 and AP-97-137, Mr. Haché testified that off-load tap changers are not adjusted automatically; a crew must go out in the field, switch off the transformer, manually change the taps and reconnect the transformer in order to adjust the off-load tap changer. Mr. Haché also stated that process control does not know the position the off-load tap changer, as there is no signalling from the off-load tap changer.

In these proceedings, Mr. Breton disagreed with Mr. Haché's testimony that the failure of a distribution transformer results in a circuit breaker acting to disconnect the line. Mr. Breton testified that, if there is a fault in a distribution transformer, the fuse on top of the distribution transformer blows and takes it off-line. The circuit breaker disconnects the line where there is a fault on the line, not at the distribution transformer. In Mr. Breton's opinion, the circuit breaker is an actuator.

In Appeal Nos. AP-97-123 and AP-97-137, Ms. Susan Ryan, Compliance and Verification Officer, Department of National Revenue (now Canada Customs and Revenue Agency), testified on behalf of the respondent. Ms. Ryan testified as to her involvement in the development of Customs Notice N-010.³

ARGUMENT

Counsel for the appellant submitted that the goods in issue are physically connected and functionally joined to process control apparatus of tariff item No. 9032.89.20 and, therefore, qualify for duty relief under Code 2101. Counsel submitted that the entire process, from generation to distribution at the transformer pole, is interconnected. Because of this interconnection, all three components of the process, generation, transmission and distribution, are involved at each point in the process. Therefore, counsel submitted, process control occurs at all levels of the process.

Counsel for the appellant submitted that the goods in issue do not have to be directly attached to process control apparatus; it is sufficient that they are attached to the distribution line which, in turn, is directly attached to process control apparatus. Counsel submitted that, since even the disconnection of the distribution transformer by the fuse has an impact through the entire system, the distribution transformer is functionally joined to process control apparatus.

Counsel for the appellant submitted that, as Mr. Breton testified that the goods in issue could not be used in any manner other than as described in the evidence, there is no need for the appellant to certify the use to which the goods in issue are put. In the alternative, counsel requested that if the Tribunal is not satisfied that the actual use of the goods in issue has been established, the Tribunal send the matter back to the respondent to determine, with the assistance of the appellant, the actual use of the goods in issue.

Counsel for the respondent asked that the arguments that he made in Appeal Nos. AP-97-123 and AP-97-137 be considered in these proceedings. Counsel submitted that the goods in issue are connected to a fuse which is connected to the distribution line. Counsel submitted that it is only down the line that the circuit breaker is located. Counsel submitted that, given the different functioning of the fuse and the circuit breaker, there is no functional link between the goods in issue and process control apparatus. Counsel submitted that the goods in issue are primary equipment and are not functionally joined to process control apparatus.

DECISION

The Tribunal must determine whether the goods in issue qualify for duty relief under Code 2101, which applies to: "[a]rticles (other than goods of the tariff item Nos. enumerated below) for use in . . . [t]he goods of tariff item No. . . . 9032.89.20". Tariff item No. 9032.89.20 covers process control apparatus, excluding sensors, which converts analog signals from or to digital signals. The *Explanatory Notes to the*

3. Department of National Revenue, "Interpretation of Tariff Code 2101 as it Relates to an Electrical Network" (5 December 1995).

*Harmonized Commodity Description and Coding System*⁴ to heading No. 90.32 provide that the heading covers:

automatic regulators . . . intended for use in complete automatic control systems which are designed to bring a quantity, electrical or non-electrical, to, and maintain it at, a desired value, stabilised against any disturbances, by constantly or periodically measuring its actual value. They consist essentially of the following devices:

- (A) **A measuring device** (sensing device, converter, resistance probe, thermocouple, etc.) which determines the actual value of the variable to be controlled and converts it into a proportional electrical signal.
- (B) **An electrical control device** which compares the measured value with the desired value and gives a signal (generally in the form of a modulated current).
- (C) **A starting, stopping or operating device** (generally contacts, switches or circuit breakers, reversing switches or, sometimes, relay switches) which supplies current to an actuator in accordance with the signal received from the control device.

An automatic regulator within the meaning of Note 6 (b) to this Chapter consists of the devices described in (A), (B) and (C) above, whether assembled together as a single entity or in accordance with Note 3 to this Chapter, a functional unit.

An automatic regulator that is also process control apparatus is classified under tariff item No. 9032.89.20.

The Tribunal must determine whether the goods in issue are “for use in” process control apparatus of tariff item No. 9032.89.20. At the time of importation of the goods in issue, section 4 of the *Customs Tariff* provided that:

The expression “for use in”, wherever it occurs in a tariff item in Schedule I or a code in Schedule II in relation to goods, means, unless the context otherwise requires, that the goods must be wrought into, attached to or incorporated into other goods as provided for in that tariff item or code.⁵

The Tribunal adopts the interpretation of the term “attached to” as it was used in *Sony of Canada v. DMNR*,⁶ whereby goods are attached to other goods if they are “physically connected and are functionally joined” to the latter.⁷ In order for the Tribunal to determine whether the goods in issue are physically connected and functionally joined to process control apparatus, the Tribunal must first determine what constitutes process control apparatus of tariff item No. 9032.89.20.

The *Explanatory Notes* to heading No. 90.32 provide that the automatic regulators of this heading include a measuring device, an electrical control device and a starting, stopping or operating device. The evidence before the Tribunal is that voltage and current transformers monitor the levels on the transmission lines. These transformers feed information to control relays located in the substation, which interpret the information and send a signal to circuit breakers which will take the distribution line on- or off-line, as required. It is the Tribunal’s view that these voltage and current transformers, which are measuring devices, the control relays, which are electrical control devices, and the circuit breakers, which are starting, stopping or operating devices, form a functional unit and that this functional unit is an automatic regulator of heading No. 90.32. The Tribunal must, therefore, determine whether this functional unit is “[p]rocess control

4. Customs Co-operation Council, 1st ed., Brussels, 1986 [hereinafter *Explanatory Notes*].

5. *Supra* note 2. Due to the tariffication of the tariff codes, the tariff codes and the reference to tariff codes in this definition were eliminated in the new *Customs Tariff*, S.C. 1997, c. 36.

6. (12 December 1996), AP-95-262 (CITT) [hereinafter *Sony*].

7. *Ibid.* at 6.

apparatus, excluding sensors, which converts analog signals from or to digital signals” pursuant to tariff item No. 9032.89.20.

The appellant has taken the position that process control should be interpreted broadly to include any article that modifies the actions, status or components of the electrical network. The respondent takes a narrower view, arguing that process control only exists where control over the three elements of the electrical network (generation, transmission and distribution) is exerted. The respondent takes the position that process control can only occur at the regional and central control levels. In the Tribunal’s view, the answer as to what constitutes process control lies somewhere between these two poles.

It is the Tribunal’s view that there are two types of decisions being made by the network. The first are decisions to protect the network and its major components from damage due to random or uncontrolled events. The second are decisions relating to ensuring that the network performs according to design and delivers the desired results. The former are protective in nature, while the latter constitute the control or management of the system. It is the Tribunal’s view that “process control” includes the functioning of devices that collectively monitor the system, interpret the data received and take action to restore the system to preset values. Therefore, devices which participate in control or management decisions engage in process control. In addition, devices which participate in certain protective decisions can also be engaging in process control.

The Tribunal does not accept the respondent’s view that, to constitute process control, all three elements of the process (generation, transmission and distribution) must be controlled. It is the Tribunal’s view that the control of a single element of the process, or an aspect of a single element of the process, may constitute process control.⁸ The Tribunal notes that this position is consistent with the terms of Customs Notice N-010, which provides that sub-transmission substations, which are usually rated at above 44 kV are, for the most part, equipped with a control centre and that, despite the fact that a sub-transmission substation controls the transmission of electricity and is not involved in its generation or distribution, such control centres are classified under tariff item No. 9032.89.20.

The evidence before the Tribunal is that the functional unit, composed of the voltage and current transformers, control relays and circuit breakers, monitors the transmission of electricity to ensure that voltage and other variables are at appropriate settings. The evidence before the Tribunal is that the control relays interpret the data received from the voltage and current transformers and send a signal to other equipment, such as the circuit breakers or switchgear, to direct that equipment to take action to restore the system to preset values. The Tribunal, therefore, finds that this functional unit participates in management and control decisions and is, therefore, engaged in process control. The Tribunal’s view is that the functional unit, composed of the voltage and current transformers, control relays and circuit breakers, is process control apparatus under tariff item No. 9032.89.20.

The evidence before the Tribunal is that the goods in issue are physically connected, through the fuse and the distribution line, to the control relays and circuit breakers which form part of the process control

8. The Tribunal does not accept the respondent’s position that the Tribunal’s decision in *Asea Brown Boveri v. DMNR* (10 June 1998), AP-93-392 (CITT), confirms that process control is only found at the central or master control level. The Tribunal notes that, in its reasons in that case, it simply stated that the evidence of the respondent’s first witness, that it must be master control in order to be process control apparatus, coincided with the wording of Customs Notice N-010 and the testimony of the departmental official. The Tribunal did not make a finding as to whether or not it must be master control in order to be process control apparatus.

apparatus. However, physical connection is not sufficient; the goods in issue must also be functionally joined to the process control apparatus.

It is the Tribunal's view that the goods in issue are not functionally joined to the process control apparatus. The goods in issue are passive devices which simply sit on the distribution line and step down the voltage to preset levels appropriate for distribution to retail customers. The goods in issue cannot vary the preset level automatically; a crew must go out in the field and manually adjust the off-load tap changer. The goods in issue are connected to the distribution line through a disconnect switch that is equipped with a fuse. The goods in issue do not react or respond to any direction from process control apparatus. The fuse blows if the goods in issue experience a fault. However, no signal from process control apparatus is required before the fuse blows. As the goods in issue do not have an active role in carrying out directions from the process control apparatus, it is the Tribunal's view that they are not functionally joined to that apparatus. Therefore, the goods in issue do not qualify for duty relief under Code 2101 as goods for use in process control apparatus of tariff item No. 9032.89.20.

Accordingly, the appeals are dismissed.

Pierre Gosselin
Pierre Gosselin
Presiding Member

Raynald Guay
Raynald Guay
Member

Peter F. Thalheimer
Peter F. Thalheimer
Member