

Ottawa, Monday, February 21, 2000

**Appeal No. AP-98-001**

IN THE MATTER OF an appeal heard on April 14, 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 January 6 and March 11 and 25, 1998, with respect to a request 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 appeal is allowed.

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 No. AP-98-001

ASEA BROWN BOVERI INC.

Appellant

and

THE DEPUTY MINISTER OF NATIONAL REVENUE

Respondent

This is an appeal 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 first issue in this appeal is whether certain bushings imported by the appellant are properly classified under tariff item No. 8544.60.00 as other insulated electric conductors, for a voltage exceeding 1,000 V, whether or not fitted with connectors, as determined by the respondent, or should be classified under tariff item No. 8504.90.91 as parts of the goods of tariff item No. 8504.21.20, 8504.22.00, 8504.23.00 or 8504.34.00 (electrical transformers), as claimed by the appellant. The second issue in this appeal is whether these bushings qualify for duty relief under Code 2101 as articles for use in the goods of tariff item No. 9032.89.20.

**HELD:** The appeal is allowed. It is the Tribunal's view that the goods in issue are parts, as they form a complete unit with the power transformer and are necessary for its use. The goods are also committed to use with power transformers, as they are specifically designed for the power transformer and have no other use. It is also the Tribunal's view that the goods in issue are more complex than the conductors contemplated by heading No. 85.44. Therefore, according to the Notes to Section XVI, the Tribunal is to classify the goods in issue, if they are suitable for use solely or principally with a particular machine, with that machine. As the Tribunal finds that the goods in issue are for use solely or principally with power transformers, they should be classified with the power transformers in heading No. 85.04. The goods in issue imported prior to January 1, 1994, should be classified under tariff item No. 8504.90.10. The goods in issue imported on and after January 1, 1994, should be classified under tariff item No. 8504.90.91.

The Tribunal is also of the view that the goods in issue qualify for duty relief under Code 2101. As a preliminary matter, the Tribunal notes that the parties agreed that on-load tap changers should be classified as parts of transformers under tariff item No. 8504.90.91. In Appeal No. AP-97-123, the Tribunal found that on-load tap changers qualified for duty relief under Code 2101 as goods for use in process control apparatus of tariff item No. 9032.89.20. As the on-load tap changers are parts of power transformers, it is the Tribunal's view that the power transformer has uses and functions that include those of the on-load tap changers. Therefore, the power transformer, as the "whole" of which the on-load tap changer forms a part, is for use in process control apparatus of tariff item No. 9032.89.20. Given the foregoing, the Tribunal finds that other parts of the power transformer, for example, the goods in issue, are also for use in process control apparatus.

Place of Hearing: Ottawa, Ontario  
Date of Hearing: April 14, 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

Clerk of the Tribunal: Anne Turcotte

Appearances: Peter E. Kirby and Michael Sherbo, for the appellant  
Stéphane Lilkoff, for the respondent

**Appeal No. AP-98-001**

**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**

This is an appeal under section 67 of the *Customs Act*<sup>1</sup> 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 January 6 and March 11 and 25, 1998. The first issue in this appeal is whether certain bushings imported by the appellant are properly classified under tariff item No. 8544.60.00 of Schedule I to the *Customs Tariff*<sup>2</sup> as other insulated electric conductors, for a voltage exceeding 1,000 V, whether or not fitted with connectors, as determined by the respondent, or should be classified under tariff item No. 8504.90.91 as parts of the goods of tariff item No. 8504.21.20, 8504.22.00, 8504.23.00 or 8504.34.00 (electrical transformers), as claimed by the appellant. The second issue in this appeal is whether these bushings qualify for duty relief under Code 2101 of Schedule II to the *Customs Tariff* as articles for use in the goods of tariff item No. 9032.89.20. The relevant tariff nomenclature is as follows:

85.04	Electrical transformers, static converters (for example, rectifiers) and inductors.
8504.90	-Parts
8504.90.91	---Of the goods of tariff item No. 8504.21.20, 8504.22.00, 8504.23.00 or 8504.34.00 <sup>3</sup>
85.44	Insulated (including enamelled or anodized) wire, cable (including co-axial cable) and other insulated electric conductors, whether or not fitted with connectors; optical fibre cables, made up of individually sheathed fibres, whether or not assembled with electric conductors or fitted with connectors.
8544.60.00	-Other electric conductors, for a voltage exceeding 1,000 V <sup>4</sup>

1. R.S.C. 1985 (2d Supp.), c. 1 [hereinafter Act].
2. R.S.C. 1985 (3d Supp.), c. 41.
3. For those importations prior to January 1, 1994, tariff item No. 8504.90.91 did not exist. Equivalent tariff provisions were found in tariff item No. 8504.90.10 for the relevant period prior to January 1, 1994.
4. For those importations after June 12, 1994, tariff item No. 8544.60.00 did not exist. For the relevant period after June 12, 1994, tariff item No. 8544.60.90 provided for other electrical conductors, for a voltage exceeding 1,000 V, which were not submersible cables for a voltage exceeding 345 kV.

## **EVIDENCE**

The parties agreed to include on the record of these proceedings the evidence in Appeal Nos. AP-97-123, AP-97-124 and AP-97-125, and AP-97-137.

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 a expert in the field of power engineering to give opinion evidence on issues of process control and on the manufacture of the goods in issue. 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 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 high- and medium-voltage bushings for use in high-voltage power transformers. The bushings are the equipment through which the power transformer is connected to the electrical network. The goods in issue include both GOB and GOE bushings. The main difference between these two types of bushings is their voltage rating. The GOB bushings have system voltage ratings from 52 kV to 170 kV, while the GOE bushings have system voltage ratings of over 300 kV.

Mr. Haché described the goods in issue as being composed of, starting from the top, a bare piece of copper or aluminum wire to which a clamp or flexible connector is attached to connect the power transformer to the busbar. The copper or aluminum is a conductor that runs from the top of the bushing through to the bottom, where it is connected to the windings in the power transformer so that power can flow from the busbar through the bushing to the power transformer. The conductor is surrounded by a porcelain or silicon rubber insulator, which also provides electrical and mechanical strength to the bushing. The conductor is immersed in oil inside the porcelain insulator. The oil serves the dual purpose of cooling the conductor and providing electrical insulation. The conductor is also wrapped in layers of paper and aluminum foil. The paper, which has absorbed the oil, is a good insulator. The aluminum ensures that there is the same voltage gradient inside the bushing as outside to prevent faults. The bushing is mounted on a turret which is in the power transformer. The turret is contained in the transformer tank and it, as well as the bottom part of the bushing, is immersed in oil. The bottom part of the turret contains a current transformer which measures the amount of current flowing in or out of the power transformer. The current transformer is directly connected to protection relays in the substation.

Mr. Haché explained that a power transformer will have seven or eight bushings mounted on it, each with its own current transformer. There can be up to 16 current transformers on the power transformer. The current transformers are connected to relays for monitoring and automation purposes. If a relay detects a fault, based on the readings that it is receiving from the current transformer, the relay trips a circuit breaker to respond to isolate the fault. In his testimony in Appeal Nos. AP-97-123 and AP-97-137, Mr. Haché explained how the on-load tap changer in the power transformer reacts to signals from the relays by moving up or down one tap to connect the power transformer differently and adjust the voltage.

Mr. Haché testified that bushings are only sold separately from a power transformer where the bushing is being used as a spare part. He stated that, to order a replacement bushing, the customer has to provide details on the power transformer in which the bushing will be placed, usually by specifying the power transformer serial number. Bushings are not interchangeable.

Mr. Haché testified that bushings have no use other than as parts of the power transformer and that the bushing is required for the operation of the power transformer. Without the bushing, the power could not get to the power transformer. Mr. Haché testified that bushings serve many functions, including that of an insulated conductor, that they provide mechanical strength and that they have a dielectric function and a cooling function. Mr. Haché stated that the goods in issue are always referred to as “bushings” in the industry and that other goods are referred to as “conductors”.

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 and on bushings. 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 testified that the function of the bushing is to conduct electricity into the power transformer tank. Mr. Breton confirmed that, without a bushing, the power transformer is of no use. He also stated that, while the current transformers are located in the power transformer turret below the bushings, the current transformers are not connected to the bushings and are not part of the bushings. He stated that, when the bushings are removed, the current transformers remain untouched inside the turret. Mr. Breton stated that the current transformers are located in the turret only out of convenience.

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.<sup>5</sup>

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

## ARGUMENT

Counsel for the appellant focused the first part of their argument on the tariff classification of the goods in issue. Counsel submitted that the first question which must be answered is whether or not the goods in issue are parts. Counsel relied on Memorandum D10-0-1<sup>6</sup> which sets out the following criteria for determining whether goods are parts:

Parts:

- form a complete unit with the machine;
- have no alternative function;
- are marketed and shipped as a unit;
- are necessary for the safe and prudent use of the unit; and/or
- are committed to the use of the unit.<sup>7</sup>

Counsel for the appellant submitted that power transformers are never ordered without bushings. Therefore, the bushing forms a complete unit with the power transformer. Counsel submitted that the goods in issue have no alternative function to that of bringing the power to the power transformer. Counsel submitted that, as the evidence showed that the power transformers are never sold without bushings, the goods in issue must be marketed and shipped as a unit with the power transformers. Counsel submitted that the evidence was clear that the power transformers could not function without the bushings and that the bushings are specifically designed for use with individual power transformers. Counsel also pointed out that, in his testimony, Mr. Breton referred to bushings as “being a part of a transformer”.

Counsel for the appellant further submitted that, from a review of the provisions of Codes 5235 and 9653 and the *Electrical Power Transformer Remission Order*,<sup>8</sup> it is clear that Parliament intended the goods in issue to be classified as parts of power transformers. To find otherwise would render the codes and the *Remission Order* of no use.

Counsel for the appellant submitted, therefore, that the goods in issue are parts. Counsel submitted that the goods in issue are not specifically named in a heading of the *Customs Tariff*, as they are not simply conductors. Counsel submitted that the goods in issue are never referred to as conductors in the industry. The goods in issue have many functions in addition to that of a conductor. Counsel further submitted that, in order for the goods to be specifically named in a heading, the heading would have to read “bushings”. Therefore, counsel submitted, the goods in issue should be classified as parts of transformers.

Counsel for the appellant focused the second part of their argument on whether the goods in issue qualify for duty relief under Code 2101. Counsel submitted that the distribution of electricity is a process and that process control occurs at all levels, local, regional and central, of the process. Counsel submitted that the current transformers are involved in process control and that they interact with local control through to central control. Counsel submitted that, as the current transformer reads the current as it passes through the goods in issue, the goods in issue are attached to and functionally joined with the current transformers. Counsel submitted that the evidence is clear that the goods in issue are going to a substation which has a control centre because of the voltage ratings of the goods. As counsel for the respondent agreed that the goods in issue are located in a station or substation in which there is a process control centre, counsel for the appellant did not have to address this issue in argument.

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6. Department of National Revenue, “Classification of Parts and Accessories in the *Customs Tariff*” (24 January 1994).

7. *Ibid.* at 9.

8. SOR/90-23 [hereinafter *Remission Order*].

Counsel for the respondent asked that the arguments that he made in Appeal Nos. AP-97-123, AP-97-124 and AP-97-125, and AP-97-137 be considered in these proceedings. Counsel submitted that the goods in issue are properly classified as insulated electric conductors in heading No. 85.44. Counsel submitted that Rule 1 of the *General Rules for the Interpretation of the Harmonized System*<sup>9</sup> requires classification to be determined on the basis of the terms of the headings. Even if the goods in issue are parts, Note 2(a) to Section XVI of the *Customs Tariff* requires parts to be classified in the specific heading for that part and not with the goods to which the part will be eventually attached. Counsel submitted that bushings have a specific heading, as they are electrical conductors.

Counsel for the respondent submitted that the terms of the codes and the *Remission Order* cited by counsel for the appellant cannot be used to determine tariff classification. Counsel submitted that the codes are not contained in Schedule I to the *Customs Tariff* and that analogies between wording can only be made from Schedule I to Schedule II pursuant to the provisions of subsection 68(3) of the *Customs Tariff*.

With respect to the applicability of Code 2101, counsel for the respondent submitted that the evidence is that there is no relationship between the goods in issue and the current transformers. Therefore, the goods in issue are not for use in process control apparatus. Counsel submitted that the goods in issue are used in the generation, transmission and distribution of electricity, but are not for use in process control.

## **DECISION**

The first issue before the Tribunal is the tariff classification of the goods in issue. Section 10 of the *Customs Tariff* provides that the classification of imported goods under a tariff item shall be determined in accordance with the *General Rules* and the *Canadian Rules*.<sup>10</sup> Section 11 of the *Customs Tariff* provides that, in interpreting the headings and subheadings in Schedule I to the *Customs Tariff*, regard shall be had to the *Compendium of Classification Opinions to the Harmonized Commodity Description and Coding System*<sup>11</sup> and the *Explanatory Notes to the Harmonized Commodity Description and Coding System*.<sup>12</sup>

The *General Rules* are structured in cascading form. If the classification of an article cannot be determined in accordance with Rule 1, then regard must be had to Rule 2, etc. Rule 1 provides the following:

The titles of Sections, Chapters and sub-Chapters are provided for ease of reference only; for legal purposes, classification shall be determined according to the terms of the headings and any relative Section or Chapter Notes and, provided such headings or Notes do not otherwise require, according to the [subsequent rules].

The Notes to Section XVI provide that parts of machines are to be classified in their respective headings where the parts are goods included in any of the headings of Chapter 84 or 85. Other parts, if suitable for use solely or principally with a particular kind of machine, are to be classified with that machine. Therefore, the first question which the Tribunal must address is whether the goods in issue are parts.

The Tribunal finds that the goods in issue are parts. Memorandum D10-0-1 sets forth five criteria for establishing that goods are parts which have been developed through Tribunal and Federal Court of Canada case law. As Memorandum D10-0-1 states, these criteria have no particular order of precedence and

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9. *Supra* note 2, Schedule I [hereinafter *General Rules*].

10. *Ibid.*

11. Customs Co-operation Council, 1st ed., Brussels, 1987.

12. Customs Co-operation Council, 1st and 2d ed., Brussels, 1986 and 1996 [hereinafter *Explanatory Notes*].



can be used singly or in combination. The criteria are that parts: (i) form a complete unit with the machine of which they are a part; (ii) have no alternative function; (iii) are marketed and shipped as a unit; (iv) are necessary for the safe and prudent use of the unit; and (v) are committed to the use of the unit. The evidence before the Tribunal is that power transformers are always sold with the goods in issue, that the goods in issue are only sold separately when they are sold as replacement parts and that the goods in issue are specifically designed for use with power transformers. The evidence before the Tribunal is also that the goods in issue are required in order for the power transformer to function and that there is no other use to which the goods in issue can be put. Given this evidence, the Tribunal's view is that the goods in issue form a complete unit with the power transformer and are necessary for its use. The Tribunal is also of the view that the goods in issue are committed to use with the power transformer, as they are specifically designed for the power transformer and have no other use. Therefore, the goods in issue are parts.

Note 2 to Section XVI requires the Tribunal to determine whether the goods in issue, as parts, are included in any of the headings of Chapter 84 or 85. Counsel for the respondent submitted that the goods in issue are included in heading No. 85.44 as other insulated conductors. According to the *Explanatory Notes*, goods of heading No. 85.44 are made up of the following elements: (i) a conductor; (ii) insulating material; (iii) in certain cases, a metal sheath; and (iv) sometimes, a metal armouring to protect underground or submarine cable.

The Tribunal finds that the goods in issue are more complex than the conductors contemplated by heading No. 85.44. While the goods in issue include a conductor which enables the power to flow from the busbar to the power transformer, the goods in issue include many more complex components which have additional functions. The porcelain or silicon rubber insulator not only provides electrical insulation to the conductor but also provides structural and mechanical strength in the event of power surges. The oil in which the conductor is immersed serves an insulating and a cooling purpose. The aluminum and paper wrappings which are around the conductor ensure that the voltage gradient inside the goods in issue is the same as that outside the goods to prevent faults or flashovers. The Tribunal is of the view that the terms of heading No. 85.44 and the *Explanatory Notes* contemplate goods which have no function other than to conduct electricity. As the Tribunal is of the view that the goods in issue are more complex than mere insulated conductors, the Tribunal finds that the goods in issue are not included in heading No. 85.44.

The Notes to Section XVI then require the Tribunal to classify the goods in issue, if they are suitable for use solely or principally with a particular machine, with that machine. As noted above, the evidence before the Tribunal is that the goods in issue are designed specifically for use in power transformers and that they have no other use. Therefore, the Tribunal finds that the goods in issue are for use solely or principally with power transformers and that they should be classified with the power transformers in heading No. 85.04. The goods in issue imported prior to January 1, 1994, should be classified under tariff item No. 8504.90.10. The goods in issue imported on and after January 1, 1994, should be classified under tariff item No. 8504.90.91.

The second issue which the Tribunal must determine is whether the goods in issue qualify for duty relief under Code 2101. As a preliminary matter, the Tribunal notes that the parties agreed that the evidence in Appeal No. AP-97-123 is to be included on the record in these proceedings. In Appeal No. AP-97-123, the parties agreed that on-load tap changers should be classified as parts of transformers under tariff item No. 8504.90.91. As this position is to be accepted in the present proceedings, the Tribunal finds, based on the agreement of the parties, that on-load tap changers are parts of power transformers. In Appeal No. AP-97-123, the Tribunal found that on-load tap changers qualified for duty relief under Code 2101 as goods for use in process control apparatus of tariff item No. 9032.89.20. As the on-load tap changers are parts of power transformers, it is the Tribunal's view that the power transformer has uses and functions that

include those of the on-load tap changers. Therefore, the power transformer, as the “whole” of which the on-load tap changer forms a part, is for use in process control apparatus of tariff item No. 9032.89.20.

Given the Tribunal’s finding that the power transformer is for use in process control apparatus, the Tribunal finds that other parts of the power transformer, for example, the goods in issue, are also for use in process control apparatus. Therefore, the goods in issue qualify for duty relief under Code 2101 as goods for use in process control apparatus of tariff item No. 9032.89.20.

Accordingly, the appeal is allowed.

Pierre Gosselin  
Pierre Gosselin  
Presiding Member

Raynald Guay  
Raynald Guay  
Member

Peter F. Thalheimer  
Peter F. Thalheimer  
Member