



Ottawa, Friday, November 22, 2002

Appeal No. AP-2001-071

IN THE MATTER OF an appeal heard on May 9, 2002, under section 67 of the *Customs Act*, R.S.C. 1985 (2d Supp.), c. 1;

AND IN THE MATTER OF several decisions of the Commissioner of the Canada Customs and Revenue Agency dated October 1, 2001, made pursuant to subsection 60(4) of the *Customs Act*.

**BETWEEN**

**BRECKNELL, WILLIS & CO. LTD.**

**Appellant**

**AND**

**THE COMMISSIONER OF THE CANADA CUSTOMS AND  
REVENUE AGENCY**

**Respondent**

**DECISION OF THE TRIBUNAL**

The appeal is allowed.

James A. Ogilvy  
James A. Ogilvy  
Presiding Member

Michel P. Granger  
Michel P. Granger  
Secretary



UNOFFICIAL SUMMARY

Appeal No. AP-2001-071

BRECKNELL, WILLIS & CO. LTD.

Appellant

AND

THE COMMISSIONER OF THE CANADA CUSTOMS AND  
REVENUE AGENCY

Respondent

This is an appeal pursuant to section 67 of the *Customs Act* from several decisions of the Commissioner of the Canada Customs and Revenue Agency dated October 1, 2001, made pursuant to subsection 60(4) of the *Customs Act*. The goods in issue are conductor rails and were imported on various dates during 2000.

The issue in this appeal is whether the goods in issue are properly classified under tariff item No. 7616.99.90 as other articles of aluminum, as determined by the respondent, or should be classified under tariff item No. 8544.51.90 as other insulated electric conductors, as claimed by the appellant.

**HELD:** The appeal is allowed. The Tribunal must classify the goods in issue according to Rule 1 of the *General Rules for the Interpretation of the Harmonized System* and must determine their classification according to the terms of the headings and any relative Section or Chapter Notes. As none of the insulating substances or devices put forward by the appellant would qualify the goods in issue as insulated goods, the Tribunal does not consider the goods in issue to be insulated electric conductors and, therefore, cannot classify them in heading No. 85.44. Regarding heading No. 76.16, since it has a residual character, before determining whether the goods in issue are classifiable in this heading, the Tribunal must ensure that they cannot be classified elsewhere in the nomenclature. After having looked at other alternative headings, the Tribunal is of the opinion that the goods in issue must be classified in heading No. 76.04, which covers aluminum bars, rods and profiles. The Tribunal finds that the goods in issue must be classified under tariff item No. 7604.29.20 as other worked aluminum bars, rods and profiles of aluminum alloys.

Place of Hearing:	Vancouver, British Columbia
Date of Hearing:	May 9, 2002
Date of Decision:	November 22, 2002
Tribunal Member:	James A. Ogilvy, Presiding Member
Counsel for the Tribunal:	Dominique Laporte
Clerk of the Tribunal:	Anne Turcotte
Appearances:	Gary K. Eng , for the appellant Patricia Johnston, for the respondent



Appeal No. AP-2001-071

**BRECKNELL, WILLIS & CO. LTD.**

**Appellant**

**AND**

**THE COMMISSIONER OF THE CANADA CUSTOMS AND  
REVENUE AGENCY**

**Respondent**

TRIBUNAL: JAMES A. OGILVY, Presiding Member

**REASONS FOR DECISION**

**INTRODUCTION**

This is an appeal pursuant to section 67 of the *Customs Act*<sup>1</sup> from several decisions of the Commissioner of the Canada Customs and Revenue Agency dated October 1, 2001, made pursuant to subsection 60(4) of the Act. The goods in issue, conductor rails, were imported on various dates during 2000.

The issue in this appeal is whether the goods in issue are properly classified under tariff item No. 7616.99.90 of the schedule to the *Customs Tariff*<sup>2</sup> as other articles of aluminum, as determined by the respondent, or should be classified under tariff item No. 8544.51.90 as other insulated electric conductors, as claimed by the appellant.

The tariff nomenclature put forward by the parties is as follows:

76.16	Other articles of aluminum.
76.16.99	--Other
76.16.99.90	---Other
85.44	Insulated (including enamelled or anodized) wire, cable (including coaxial 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.
	-Other electric conductors, for a voltage exceeding 80 V but not exceeding 1,000 V:
8544.51	--Fitted with connectors
8544.51.90	---Other

**EVIDENCE**

Mr. David Julian Hartland, a British chartered electrical engineer, gave evidence on the appellant's behalf. Mr. Hartland was qualified by the Tribunal as an expert in the manner in which the conductor rail system operates and is imported into and assembled in Canada. He explained that the conductor rails were used to supply electricity to the Vancouver, British Columbia, SkyTrain vehicles from the substations

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1. R.S.C. 1985 (2d Supp.), c. 1 [hereinafter Act].  
2. S.C. 1997, c. 36.

located along the line. He stated that, in order to bring electricity from the substations to the train itself, conductor rails are mounted alongside the track and that the train picks up the current from the conductor rails using a series of collector shoes down the length of the train. He testified that, since a high voltage supply is used, the conductor rails need to be insulated in order to prevent current leakage and to keep the rails away from any passengers. He explained that there were two types of insulation in the system. The first is an insulator that supports the conductor rail and stops the current from leaking to ground. The second is a cover mounted on the top of the rail and down the rear surface that prevents people and animals from touching the rail. Although Mr. Hartland acknowledged that the conductor rails were not completely covered, he testified that the conductor rail system is insulated once it is assembled on the line.

In response to questions from the respondent, Mr. Hartland indicated that the rails were of composite construction, comprising steel and aluminum. He further stated that, while the steel component was used to resist wear from the pickup shoes on the train, the aluminum component was used primarily for its qualities as an electrical conductor. In addition, Mr. Hartland testified that a third material that insulates the conductor rail is air. When asked whether he had any independent authority to support his position that “insulated” can mean not only covered but also partially covered, he responded in the negative, but stated that the *Canadian Electrical Code*<sup>3</sup> explores the possibility for a conductor to be insulated partly by air and partly by a composition-type material. Dealing with the plastic guards covering the rails, Mr. Hartland noted that they are installed principally at the passenger stations and that they neither touch the conductor rails nor envelop them entirely. With respect to the insulated mounting brackets, Mr. Hartland stated that they are spaced two metres apart and that they do not completely cover the guardrails.

In response to questions from the Tribunal, Mr. Hartland stated that the aluminum component of the rail is approximately twice the mass of the steel capping, representing 13 kg/m and 6 kg/m respectively. When asked whether air could meet the definition of a “covering” under the *Explanatory Notes to the Harmonized Commodity Description and Coding System*<sup>4</sup> to heading No. 85.44, Mr. Hartland responded in the affirmative.

Mr. Ted Watanabe, a senior electrical engineer with Buzan Consultants Ltd., appeared on the respondent’s behalf. The Tribunal qualified Mr. Watanabe as an expert in electrical systems, with expertise specifically in the identification of insulated versus uninsulated electric conductors. He stated that, in his view, an insulated conductor is one that does not allow electric current to flow out of it in an unintended manner. Mr. Watanabe also referred to the *Canadian Electrical Code*, which provides that “insulated” means separated from other conducting surfaces by a dielectric material or air space having a degree of resistance to the passage of current and to disruptive discharge sufficiently high for the condition of use. He testified that, in everyday engineering language, an insulated conductor is a conductor that has an insulating material surrounding it and not a conductor surrounded by air. Furthermore, when asked to comment on the definition of “insulated conductor” of the Institute of Electrical and Electronics Engineers (IEEE), which definition provides, in part, that it is a conductor covered with a dielectric other than air, Mr. Watanabe stated that it should be interpreted to mean that the conductor is covered with a solid material, such as rubber or plastic. In respect of the appellant’s contention that the plastic guards insulate the rails, he stated that it was not his opinion that they play this role, as they do not provide a covering surrounding the rails. Regarding the mounting brackets, although they do insulate specifically from the underlying steel support brackets that are holding the rails in place, Mr. Watanabe indicated that they do not surround the conductor and prevent accidental contact. Finally, with respect to air, he stated that, although it serves the purpose of

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3. Part I, 18th ed. (1998).

4. Customs Co-operation Council, 2d ed., Brussels, 1996 [hereinafter Explanatory Notes].

insulating the rails from each other, in the context of the term “insulated conductor”, air does not provide insulation, as it does not prevent accidental contact by a person or other objects.

## ARGUMENT

The appellant argued that the conductor rail in issue is a complete or finished article and should be classified as an insulated electric conductor under tariff item No. 8544.51.90. It also submitted that there was nothing in the Explanatory Notes to heading No. 85.44 requiring that an electric conductor be completely surrounded in order to be insulated.

The respondent argued that the goods in issue are properly classified under tariff item No. 7616.99.90 as other articles of aluminum. He submitted that the goods in issue are a composite, as they consist of more than one material, i.e. aluminum and steel. It was further submitted that, according to Rule 3 (b) of the *General Rules for the Interpretation of the Harmonized System*,<sup>5</sup> which governs the classification of composite goods, the goods in issue are to be considered articles of aluminum, as the primary component, and the material giving these goods their essential character, which is to conduct electricity, is aluminum. Accordingly, it is the respondent’s position that the goods in issue are accurately described in heading No. 76.16, and more precisely in subheading No. 7616.99 and under tariff item No. 7616.99.90.

It is the respondent’s position that the goods in issue cannot be classified in heading No. 85.44. In accordance with the Explanatory Notes to heading No. 85.44, classification in this heading is premised on the goods being insulated, which means, based on the respondent’s expert testimony, that they must be separated from another conducting surface. Furthermore, the Explanatory Notes to heading No. 85.44 provide that the aim of covering insulated materials is to prevent leakage of electricity and to protect the conductor against damage. Dealing with the three possible types of insulation, the respondent submitted that the plastic guards, as well as the insulators, do not completely envelop or encase the rails. With respect to air, the respondent argued that, according to the IEEE’s definition of “insulation”, it is not an insulator and that, in addition, Mr. Watanabe’s expert testimony indicates that air is not an insulator in the engineering sense of the word “insulation”.

## DECISION

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>6</sup> Section 11 of the *Customs Tariff* provides that, in interpreting the headings and subheadings in the schedule, regard shall be had to the *Compendium of Classification Opinions to the Harmonized Commodity Description and Coding System*<sup>7</sup> and the Explanatory Notes.

The General Rules are structured in cascading form. If the classification of goods cannot be determined in accordance with Rule 1, then regard must be had to Rule 2 and so on. 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

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5. *Supra* note 2, schedule [hereinafter General Rules].

6. *Supra* note 2, schedule.

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

Section or Chapter Notes and, provided such headings or Notes do not otherwise require, according to the [subsequent rules].

The appellant submitted that the goods in issue should be classified in heading No. 85.44 as insulated electric conductors, while the respondent submitted that they were properly classified in heading No. 76.16 as other articles of aluminum. At the hearing, the Tribunal also looked at other potential headings in which the goods in issue could be classified. Among them was heading No. 76.04, which covers aluminum bars, rods and profiles. Consequently, the competing headings in this case are as follows:

- 76.04 Aluminum bars, rods and profiles.
- 76.16 Other articles of aluminum.
- 85.44 Insulated (including enamelled or anodized) wire, cable (including coaxial 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.

The appellant urged the Tribunal to find that the goods in issue were classifiable in heading No. 85.44 as insulated electric conductors. In accordance with Rule 1 of the General Rules, the Tribunal will first determine whether the terms of this heading, as well as the Section and Chapter Notes, properly describe the goods in issue.

The appellant argued that the goods in issue are insulated and, therefore, should fall in heading No. 85.44 as insulated electric conductors. While acknowledging that the rails are not themselves insulated, it submitted that they have the essential character of an insulated conductor as a finished or complete article. The appellant argued that three types of insulation qualify the goods in issue as insulated conductors: plastic guards, dielectric mounting brackets and air.

Regard must first be given to the Explanatory Notes to heading No. 85.44, which read, in part, as follows:

**Provided they are insulated**, this heading covers electric wire, cable and other conductors (e.g., braids, strip, bars) used as conductors in electrical machinery, apparatus or installations.

The goods of this heading are made up of the following elements:

- (A) A conductor - this may be single strand or multiple, and may be wholly of one metal or of different metals.
- (B) One or more coverings of insulating material - the aim of these coverings is to prevent leakage of electric current from the conductor, and to protect it against damage. The insulating materials mostly used are rubber, paper, plastics, asbestos, mica, micanite, glass fibre yarns, textile yarns (whether or not waxed or impregnated), varnish, enamel, pitch, oil, etc.

[Emphasis added]

In order to comply with the preceding note, the goods in issue must first be “insulated”. There was much discussion at the hearing regarding the meaning to be given to this term. According to the definitions put forward by Mr. Watanabe, the term “insulated”, when taken in isolation, means “separated from other conducting surfaces by a dielectric material or air space having a degree of resistance to the passage of current and to disruptive discharge sufficiently high for the condition of use”.<sup>8</sup> At first glance, this would appear to support the appellant’s contention that the goods in issue can be insulated solely with air. However, the IEEE defines “insulated conductor” as follows:

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8. *Supra* note 3, s.v. “insulated”.

- (1) A conductor encased within material of composition and thickness that is recognized by this Code as electrical insulation.
- (2) A conductor covered with a dielectric (other than air) having a rated insulating strength equal to or greater than the voltage of the circuit in which it is used.<sup>9</sup>

Therefore, when used to qualify “conductor”, the term “insulated” has a more restrictive meaning and no longer contemplates insulation with air. Since the Explanatory Notes to heading No. 85.44 clearly require the conductor “to be insulated”, in order to meet this description, the Tribunal is of the view that the goods in issue must meet the definition of “insulated conductor”.

In addition, the Explanatory Notes provide that, to fall in heading No. 85.44, the goods in issue must have “[o]ne or more coverings of insulating material - the aim of these coverings is to prevent leakage of electric current from the conductor, and to protect it against damage.” At the hearing, there were opposing views as to whether the covering needs to be continuous or whether it can be only partial. The Tribunal concurs with Mr. Watanabe that the meaning to be given to “coverings” in the Explanatory Notes and “covered with a dielectric” in the IEEE’s definition of “insulated conductor” is that the conductor must be completely surrounded with insulating material and must not have any uninsulated surfaces exposed.

In the Tribunal’s view, none of the insulating substances or devices put forward by the appellant would qualify the goods in issue as insulated goods. Dealing first with the plastic guards, it was established during cross-examination that the plastic guards are installed only at stations and other strategic points along the train route and that, in their normal position, they are not in contact with the rail. As stated above, the Tribunal agrees with the respondent that the covering must be continuous; even if the plastic shields were considered to be a “covering” at stations and other critical points along the right of way, it is clear that significant portions of the conductor rail between stations would not be “covered” with this insulating material.

With respect to the mounting brackets, the Tribunal acknowledges that they do insulate the goods in issue, specifically from the underlying steel support brackets that hold the rails in place. Nevertheless, as for the plastic guards, it cannot be said that they render the goods in issue insulated conductors, as most of the surface area remains uncovered.

Finally, with respect to air, the Tribunal notes that the definition of “insulated conductor” specifically excludes air as a dielectric covering. Moreover, the Tribunal finds that air is not a part of the goods in issue, nor is it applied in the process of manufacture or installation. It seems trivially true that, if air were to be considered an insulator for purposes of classification, virtually all goods would be qualified as being insulated. This raises, for example, the question as to how goods could possibly fit in heading No. 73.12, which covers, among other things, stranded wire, ropes and cables not electrically insulated. Hence, the Tribunal does not consider the goods in issue to be insulated electric conductors and, therefore, cannot classify them in heading No. 85.44.

The respondent submitted that the goods in issue were properly classified in heading No. 76.16, which covers other articles of aluminum. The Tribunal will first determine, in accordance with Rule 1 of the General Rules, whether this heading covers the goods in issue. The Explanatory Notes to this heading provide, in part, the following:

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9. *The IEEE Standard Dictionary of Electrical and Electronics Terms*, 6th ed. (1996), s.v. “insulated conductor”.

This heading covers all articles of aluminium **other than** those covered by the preceding headings of this Chapter, or by Note 1 to Section XV, or articles specified or included in **Chapter 82** or **83**, or more specifically covered elsewhere in the Nomenclature.

As heading No. 76.16 has a residual character, before determining whether the goods in issue are classifiable in this heading, the Tribunal must ensure that they cannot be classified elsewhere in the nomenclature. After having looked at alternative headings, the Tribunal is of the opinion that the goods in issue must be classified in heading No. 76.04, which covers aluminum bars, rods and profiles. The Explanatory Notes to the latter heading read, in part, as follows:

These products, which are defined in Notes 1 (a) and 1 (b) to the Chapter, correspond to similar goods made of copper. The provisions of the Explanatory Note to heading 74.07 apply therefore, *mutatis mutandis*, to this heading.

The Tribunal is of the view that the goods in issue, in accordance with the Explanatory Notes to heading No. 76.04, meet the definition of “profiles” set out in Note 1 (b) of the Notes to Chapter 76.<sup>10</sup> They are manufactured using an extrusion process; they have a uniform cross-section along their whole length; and they do not conform to any of the definitions of bars, rods, wire, plates, sheets, strip, foil, tubes or pipes set out in the Notes to Chapter 76.

The evidence indicates that the goods in issue are composites made up of two components, an aluminum core or base and a steel cap. The aluminum component is made of an alloy containing about 2.5 percent of other alloying elements. Given that the General Explanatory Notes to Chapter 76 refer to the General Explanatory Notes to Section XV for the classification of composite goods, the Tribunal is of the opinion that Rule 3 (b) of the General Rules does not apply. Indeed, since the General Explanatory Notes to Section XV set out their own set of rules for the classification of composite goods, they prevail. The Notes to section XV and the Explanatory Notes to Section XV provide, in part, the following:

7.- Classification of composite articles :

Except where the headings otherwise require, articles of base metal (including articles of mixed materials treated as articles of base metal under the Interpretative Rules) containing two or more base metals are to be treated as articles of the base metal predominating by weight over each of the other metals.

Note (B) of the Explanatory Notes to Section XV states, in part, the following:

**(B) ARTICLES OF BASE METALS**

In accordance with Section Note 7, base metal articles containing two or more base metals are classified as articles of that metal which **predominates by weight** over each of the other metals, **except** where the headings otherwise require (e.g., copper-headed iron or steel nails are classified in heading 74.15 even if the copper is not the major constituent). The same rule applies to articles made partly of non-metals, **provided** that, under the General Interpretative Rules, the base metal gives them their essential character.

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10. **(b) Profiles**

Rolled, extruded, drawn, forged or formed products, coiled or not, of a uniform cross-section along their whole length, which do not conform to any of the definitions of bars, rods, wire, plates, sheets, strip, foil, tubes or pipes. The expression also covers cast or sintered products, of the same forms, which have been subsequently worked after production (otherwise than by simple trimming or de-scaling), provided that they have not thereby assumed the character of articles or products of other headings.



In calculating the proportions of the metals present for the purposes of this rule, it should be noted that :

- (1) All varieties of iron and steel are regarded as the same metal.
- (2) An alloy is regarded as being entirely composed of that metal as an alloy of which it is classified (e.g., for these purposes, a part made of brass would be treated as if it were wholly of copper).

The evidence indicates that, in a cross-sectional area, the weight of the aluminum over any given length is greater than that of the stainless steel by a factor of 2:1.<sup>11</sup> Accordingly, the Tribunal is of the view that the goods in issue, taking into account their composite nature, must be classified as articles of aluminum, as this metal predominates by weight over steel. In light of the above, and as the goods in issue are profiles, the Tribunal finds that the goods in issue must be classified as aluminum bars, rods and profiles in heading No. 76.04.

Having classified the goods in issue at the heading level, the Tribunal will next classify them at the subheading level. For this purpose, Rule 6 of the General Rules provides the following:

For legal purposes, the classification of goods in the subheadings of a heading shall be determined according to the terms of those subheadings and any related Subheading Notes and, *mutatis mutandis*, to the above Rules, on the understanding that only subheadings at the same level are comparable. For the purpose of this Rule the relative Section and Chapter Notes also apply, unless the context otherwise requires.

The competing subheadings are as follows:

	[Aluminum bars, rods and profiles.]
7604.10	-Of aluminum, not alloyed
	[-Of aluminium alloys:]
7604.21	--Hollow profiles
7604.29	--Other

In accordance with Note 1 of the Subheading Notes of Chapter 76,<sup>12</sup> the goods in issue are defined as aluminium alloys, as the weight of the other alloying elements of the aluminum component exceeds 1 percent. As the goods in issue cannot be described as hollow profiles, the Tribunal finds that they can only be classified in subheading No. 7604.29 as other aluminum bars, rods and profiles of aluminium alloys.

The Tribunal must now classify the goods in issue at the tariff item level. In this regard, Rule 1 of the *Canadian Rules* states:

For legal purposes, the classification of goods in the tariff items of a subheading or of a heading shall be determined according to the terms of those tariff items and any related Supplementary Notes and, *mutatis mutandis*, to the [General Rules], on the understanding that only tariff items at the same level are comparable. For the purpose of this Rule the relative Section, Chapter and Subheading Notes also apply, unless the context otherwise requires.

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11. The evidence indicates that the mass of the aluminum is 13 kg/m, while the mass of the steel capping is 6 kg/m.

12. Note 1 (b) of these Subheading Notes describes “[a]luminum alloys” as “[m]etallic substances in which aluminum predominates by weight over each of the other elements, provided that:

- (i) the content by weight of at least one of the other elements or of iron plus silicon taken together is greater than the limit specified in the foregoing table; or
- (ii) the total content by weight of such other elements exceeds 1 %.”

The tariff items of subheading No. 7604.29 are the following:

- [---Unworked]
- 7604.29.11 ----Bars and rods, of which the maximum cross-sectional dimension exceeds 12.7 mm
- 7604.29.12 ----Bars and rods, of which the maximum cross-sectional dimension does not exceed 12.7 mm;
- 7604.29.20 ---Worked

Note 1 (a) of the Supplementary Notes of Chapter 76 defines the term “unworked” as meaning, when referring to bars, rods and profiles, “products which have not been subsequently worked after production (for example, not machined, drilled, punched, twisted or crimped)”. The technical specification document of the conductor rails indicates that two holes are pre-drilled in the rail at each end to facilitate joining. It also indicates that the stainless steel wearing face is formed by “J” shaped pieces, which are shrunk onto the aluminum extrusion by a longitudinal seam weld.<sup>13</sup> Therefore, the Tribunal finds that the goods in issue do not meet the definition of “unworked” and must be classified under tariff item No. 7604.29.20 as other worked aluminum bars, rods and profiles of aluminum alloys.

For the foregoing reasons, the appeal is allowed.

James A. Ogilvy  
James A. Ogilvy  
Presiding Member

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13. Appellant’s Brief, Product Data Sheet at 8 of 8.