OPINION OF ADVOCATE GENERAL LENZ

delivered on 2 October 1997 *

A — Introduction

1. In this case the Bundesfinanzhof (Federal Finance Court) has referred to the Court a question concerning the interpretation of the Combined Nomenclature of the Common Customs Tariff ('the CN') in the version of Annex I to Council Regulation (EEC) No 2658/87 of 23 July 1987 on the tariff and statistical nomenclature and on the Common Customs Tariff, [1] as amended by the annexes to Commission Regulation (EEC) No 3174/88 of 21 September 1988, [2] Commission Regulation (EEC) No 2886/89 of 2 August 1989 [3] and Commission Regulation (EEC) No 2472/90 of 31 July 1990. [4] The issue in the main proceedings between Techex Computer + Grafik Vertriebs GmbH ('the plaintiff') and the Hauptzollamt (Principal Customs Office) München is the tariff classification of so-called 'Vista Boards'. According to the Bundesfinanzhof's order for reference, a Vista Board consists of printed circuits which are intended to be incorporated into automatic data-processing machines and which have integrated circuits (including, *inter alia*, graphics processors and memories) as well as active and passive processing components. The printed circuits are designed for the conversion, i. e. data capture, processing and storage, of image data received from external video sources (e. g. cameras, recorders) in the form of standard television signals, or for the production of graphics.

2. According to the Judge-Rapporteur's report for the hearing, which was made available to the parties and which gave rise to no objections on their part, from 1988 to 1991 the plaintiff imported, through the Hauptzollamt München, a large number of Vista Boards which were released into free circulation and classified under heading No 8473 of the CN ('Parts and accessories ... suitable for use solely or principally with machines of heading Nos 8469 to 8472') as parts for machines coming under heading No 8471. Customs duty at the rate of 4% was levied on them.

3. By an amendment notice of 7 November 1991 and by a decision of 28 December 1991 following an objection made through administrative channels, the Hauptzollamt, upon reviewing the matter, reached the conclusion that it did not matter that the Vista Boards could process data as well as images and classified the goods under heading No 8543 8080 of the CN 1991 ('Electrical machines and apparatus, having individual functions, not specified or included elsewhere in

* Original language: German.

1 — OJ 1987 L 256, p. 1.

2 — Commission Regulation (EEC) No 3174/88 of 21 September 1988 amending Annex I to Council Regulation (EEC) No 2658/87 on the tariff and statistical nomenclature and on the Common Customs Tariff (OJ 1988 L 298, p. 1).

3 — Commission Regulation (EEC) No 2886/89 of 2 August 1989 amending Annex I to Council Regulation (EEC) No 2658/87 on the tariff and statistical nomenclature and on the Common Customs Tariff (OJ 1989 L 282, p. 1).

4 — Commission Regulation (EEC) No 2472/90 of 31 July 1990 amending Annex I to Council Regulation (EEC) No 2658/87 on the tariff and statistical nomenclature and on the Common Customs Tariff (OJ 1990 L 247, p. 1).

Chapter 85; other machines and apparatus: other') and charged customs duty at the rate of 7%. The Hauptzollamt then issued a demand for the additional duty.

4. On 6 October 1994 the Finanzgericht (Finance Court) dismissed the action brought against those decisions on the ground that the processing of image data received from external video sources in the form of standard television signals constituted an 'individual function' which ruled out classification of the goods as units of automatic data processing machines under heading No 8471 of the CN. According to the Finanzgericht, image processing is a different function from that of pure data processing. For the purpose of classification, Vista Boards were to be regarded as other electrical machines having individual functions under subheading 8543 8080 of the CN 1991 (subheading 8543 8090 of the CN 1988 to 1990).

5. Techex then appealed to the Bundesfinanzhof on a point of law, arguing in essence, according to the order for reference, that the imported products were graphics cards with a higher capacity. They were not used exclusively for the processing of images or the reception of signals from video cameras. The fact that an analogue/digital converter was incorporated in the card for the purpose of supplying external analogue signals precluded any other assessment. The processing of images, including signals from video cameras, constituted a subsidiary form of data processing, so that a Vista Board did not have an individual function and should be classified under heading No 8471 of the CN.

6. This case relates to the following headings of the Combined Nomenclature in the versions in force from 1988 to 1991:

— heading No 8471 of the CN (Section XVI, Chapter 84):

'8471	Automatic data-processing machines and units thereof; magnetic or optical readers, machines for transcribing data onto data media in coded form and machines for processing such data, not elsewhere specified or included':

— subheading 8543 8090 of the CN 1988 to 1990 (Section XVI, Chapter 85):

'8543	Electrical machines and apparatus, having individual functions, not specified or included elsewhere in Chapter 85:
	...

8543 80 — Other machines and apparatus:

...

8543 8090 — — Other machines and apparatus;'

— subheading 8543 8090 of the CN 1988 to 1990 was replaced by subheading 8543 8080 of the CN 1991 with a similar wording ('Electrical machines and apparatus, having individual functions, not specified or included elsewhere in Chapter 85; other machines and apparatus: other').

7. Note 5(B) to Chapter 84 of the CN reads as follows:

'Automatic data-processing machines may be in the form of systems consisting of a variable number of separately housed units. A unit is to be regarded as being a part of the complete system if it meets all the following conditions:

(a) it is connectable to the central processing unit either directly or through one or more other units;

(b) it is specifically designed as part of such a system (it must, in particular, unless it is a power supply unit, be able to accept or deliver data in a form (code or signals) which can be used by the system.

Such units presented separately are also to be classified within heading No 8471.

Heading No 8471 does not cover machines incorporating or working in conjunction with an automatic data-processing machine and performing a specific function. Such machines are classified in the headings appropriate to their respective function or, failing that, in residual headings.'

8. In this regard the Customs Cooperation Council has issued Explanatory Notes on the harmonized system which state as follows: [5]

'In accordance with the provisions of Note 5(E) to Chapter 84, the following classification principles should be applied in the case

5 — These Notes were published by the Council itself in French and English and, according to the case-law of the Court of Justice, may be regarded as useful aids for the interpretation of the Tariff (see the judgment in Case C-11/93 *Siemens Nixdorf* [1994] ECR I-1945, paragraph 12).

of a machine incorporating or working in conjunction with an automatic data-processing machine, and performing a specific function:

1. ...

2. Machines presented with an automatic data-processing machine and intended to work in conjunction therewith to perform a specific function other than data-processing, are to be classified as follows:

the automatic data-processing machine must be classified separately in heading 8471 and the other machines in the heading corresponding to the function which they perform unless, by application of Note 4 to Section XVI ... the whole is classified in another heading of Chapter 84, Chapter 85 or Chapter 90.' [6]

6 — Note 5(E) to Chapter 84 corresponds to the last paragraph of the previous note 5(B) to Chapter 84. It is worded: 'machines performing a specific function other than data-processing and incorporating or working in conjunction with an automatic data-processing machine are to be classified in the headings appropriate to their respective functions or, failing that, in residual headings' (Commission Regulation (EC) No 3009/95 of 22 December 1995 amending Annex I to Council Regulation (EEC) No 2658/87 on the tariff and statistical nomenclature and on the Common Customs Tariff, OJ 1995 L 319, p. 1).

9. The Note relating to heading No 8471 concerning 'automatic data-processing machines and units thereof' reads as follows:

'Data-processing consists in handling information of all kinds, in pre-established logical sequences and for a specific purpose or purposes. ...'

10. In the opinion of the Bundesfinanzhof, image processing as made possible by the imported goods can also be described as data processing in a wider technological sense. Therefore, as the case raised questions of interpretation of Community law, the Bundesfinanzhof referred the following questions to the Court for a preliminary ruling:

'1. Must Note 5(B) to Chapter 84 of the Common Customs Tariff (Combined Nomenclature 1988 to 1991) be interpreted as meaning that image processing, which the "Vista Boards" more particularly described in the grounds hereof can perform, is to be regarded as a "specific function" within the meaning

of that provision, that is to say as a function other than data processing, so that such goods are not classifiable under heading No 8471?

2. If the answer to Question 1 is in the affirmative:

Must heading No 8543 (in this instance: subheading No 8543 8080 of the Combined Nomenclature 1991, subheading No 8543 8090 of the Combined Nomenclature 1988 to 1990) be interpreted as meaning that the term "(other) electrical machines ... having individual functions, not specified or included elsewhere in this Chapter" covers products such as "Vista Boards" (1.) even if such boards are by their nature capable of being used not only for image processing but also as graphics cards for automatic data processing machines?

3. If the answer to Question 2 is in the negative:

Under which other customs tariff heading should products such as "Vista Boards" (1.) be classified?'

B — Analysis

11. To begin with, I should like to establish, on the basis of the parties' pleadings, the Commission's written replies to the questions from the Court and the oral procedure, the common ground and the points in issue with regard to the characteristics of Vista Boards.

12. It is not disputed that Vista Boards perform the functions of normal graphics cards, which fall under heading No 8471 of the CN as 'automatic data-processing machines and units thereof'. Likewise it is common ground that the functions of Vista Boards are wider than those of normal graphics boards. How much wider, however, is a matter of dispute.

13. The plaintiff in the main proceedings contends that the difference from normal graphics cards consists only in the better quality of the image representation and resolution and in a faster image formation. It adds that these features are becoming more important because of increasingly more demanding software such as Microsoft-Windows. Any personal computer on the market can represent natural images which can be altered and processed with the aid of the graphics card. Furthermore, according to

the plaintiff, there is now software containing image sequences. A good graphics card is sufficient for all these functions. Vista Boards merely work faster and with higher resolution. It is not possible to process moving images in real time. Vista Boards can only digitalize 'snapshots'.

14. This is disputed by the Commission, referring to the firm's product description. In the Commission's opinion, a Vista Board performs far more functions that a normal graphics board. According to the product description, it is equally suited for the production of graphics and the manipulation of video images. According to the Commission, the much higher price shows that Vista Boards are not comparable to normal graphics cards. [7] Therefore the additional function alone is the decisive factor in purchasing such an expensive product instead of a normal graphics card. The Commission doubts whether this function can be described only as a quality improvement compared with a normal graphics card.

15. Finally, it is common ground that Vista Boards can convert external analogue signals from, for example, video cameras into digital signals so that they are presented to the computer in a form in which they can be processed. It is also agreed that this is a data-processing function. The point in issue, however, is how Vista Boards are to be classified in the CN in view of this capacity.

16. The question whether Vista Boards are only better-quality graphics cards is not for the Court of Justice to answer but is a matter to be determined by the national court after obtaining an expert's report if necessary. This point will be discussed in more detail later. [8] For the present, it is important to note that it is generally agreed that all the functions of Vista Boards constitute data processing. The only point in issue is whether they should always be classified under heading No 8471 ('automatic data-processing machines and units thereof').

17. In the plaintiff's opinion, they can only be classified under this heading because, so far as data processing is concerned, no distinction can be made according to the source of the data. The image processing carried out by Vista Boards by means of their additional function is only one application of data-processing machines.

7 — According to the Commission's written reply of April 1997, the price is more than DM 10 000 plus value added tax.

8 — See paragraph 33 et seq. below.

18. However, the Commission distinguishes between data processing in general, or data processing *stricto sensu*, and image processing. In its view, only the former data processing within the meaning of the CN and therefore classification should be under heading No 8471. In this connection, the Commission refers, *inter alia*, to the Explanatory Notes of the Customs Cooperation Council relating to heading No 8471, according to which data processing consists in handling information of all kinds. As Vista Boards are designed to process image signals alone, they do not handle information of all kinds and cannot be classified under heading No 8471. They must therefore be treated as machines with a specific function within the meaning of Note 5(B) to Chapter 84 and classified according to their function. The Commission adds that it would not be appropriate to classify any type of data processing under heading No 8471 as this would clutter up the heading.

19. It is clear from Note E(2) of the Explanatory Notes to Chapter 84 [9] that a 'specific function' must be a function other than data processing. Accordingly, in the *Siemens Nixdorf* judgment, the Court referred to the Explanatory Notes of the Customs Cooperation Council and observed that a machine which is connected to an automatic data-processing machine and works in conjunction with it can be regarded as performing a specific function only if it performs a function 'other than data processing'. [10] However, as already mentioned, 'data processing' for the purposes of the CN means 'handling information of all kinds'. According to the Commission, this must be construed as meaning that machines which can only process data of a particular kind cannot be classified under that heading.

20. I cannot agree. Even a 'normal' personal computer contains parts which can process only quite specific data. The keyboard handles only what is entered in by finger contact. It cannot process optical or acoustic signals. However, it is classified under heading No 8471, i. e. in the field of data processing. Consequently the term 'information of all kinds' is construed broadly.

21. Moreover, the Commission contradicts itself in stating that in a few years Vista Boards may have to be included in the field of data processing and will therefore have to be classified under heading No 8471. Yet, the capabilities of Vista Boards will not have changed in any way. They will still be able to process only image signals. If nevertheless it were possible to classify them in the data-processing category, then 'information of all kinds' can only be construed in a broad sense. This would mean that machines which

9 — Note 5(E) to Chapter 84 corresponds to the last paragraph of the former note 5(B); see also footnote 6.

10 — See the judgment in Case C-11/93, cited in footnote 5, paragraph 15.

can process only quite specific kinds of information could also be included. Consequently, neither the wording of heading No 8471 nor the relevant notes offer any support for the Commission's distinction between data processing in the narrow sense and image processing.

22. The Commission bases its proposed distinction on, *inter alia*, a decision of the Harmonized System Committee of 18 November 1996 relating to the classification of a so-called media composer. According to the Commission, this decision has since been accepted as a so-called classification opinion. [11] The Commission states that the media composer is a data-processing system designed for recording digital video images, for creating video effects and for the montage and completion of video programmes for television broadcasting. It includes a central data-processing unit, special software and a NuVista card which, according to the Commission, perform the same functions as the Vista Boards which are the subject of this case. The Commission adds that, without the special software and other parts, this system can also be used as a data-processing system.

23. The Committee finally classified the media composer under heading No 8543 by 18 votes to 3. The observation was made that, in principle, the article was a data-processing system which could be classified under No 8471 but that, because of several special components, the system was designed specifically for processing video images and should not therefore, pursuant to Note 4 to Section XVI and Note 5(E) to Chapter 84, be classified under that heading. [12] The abovementioned Note 4 required the media composer to be classified under heading No 8543.

24. An expert would be necessary to carry out an exact comparison of the functions of a media composer with those of Vista Boards. It is, however, immediately clear that the media composer is designed for a specific function whereas Vista Boards only form part of such a system. This is confirmed by the fact that the classification of the media composer by the Committee was partly based on Note 4 to Section XVI, which is worded as follows:

'Where a machine (including a combination of machines) consists of individual components (whether separate or interconnected by piping, by transmission devices, by electric cables or by other devices) intended to contribute together to a clearly defined function covered by one of the headings in

11 — This relates to the approval and thus to the implementation of decisions of the Goods Classification Committee.

12 — Note 5(E) to Chapter 84 corresponds to the last paragraph of the former Note 5(B); see also footnote 6.

Chapter 84 or 85, then the whole falls to be classified within the heading appropriate to that function.'

25. It is clear from this at least that the media composer must be deemed a functional unit which contributes to a clearly defined function. Therefore it must be classified according to that single function, which in this case was taken to be the recording of video images, the creation of video effects and the montage and completion of video programmes for broadcasting. This was classified under heading No 8543 as a 'function other than data processing'. [13] Whether that specific function is the same as the function of Vista Boards is not a matter to be determined by the Court of Justice. It is a matter for the national court.

26. The other examples mentioned by the Commission concern a machine for the control of industrial drawings and one for the control of paper production. Here again, the information available to the Court does not enable it make a comparison between these machines and Vista Boards. However, it is clear that they are also examples of systems with a specific function which were classified according to that function, although this does not tell us how the individual parts of such a system have to be classified. Since the machine has to be classified only according to its function, on the basis of its design for that particular function, it is not clear how the separate parts are to be classified when considered in isolation from the complete functional unit and when they might possibly have other uses. An express rule like that for data-processing systems, according to which the individual units must be classified under the same heading as the system itself if they are presented separately, [14] does not exist for the functional unit.

27. A Vista Board is not in fact a functional unit designed for a single specific function. At the most, it may be a building block in such a system. Consequently, there can be no question of classifying a Vista Board by reference to Note 4 to Section XVI. The Commission's examples of classification are therefore not relevant to the present case since they relate to systems.

28. Furthermore, the distinguishing criterion used here by the Commission is not the same as the criterion used by the Committee in the examples. The fact that a system is designed for a single specific function is unalterable. However, when the Commission

13 — Explanatory Note 5(E) to Chapter 84, see above, paragraph 8.

14 — Note 5(B) to Chapter 84.

states that in a few years' time the special capacity of Vista Boards will no longer be 'special', so that they could then be classified under heading No 8471, the Commission is not having regard to special design, but to whether the capacity of Vista Boards is standard for personal computers or not. Consequently, the criterion for distinguishing between data processing and image processing, as proposed here by the Commission, does not correspond to the specific function criterion applied by the Committee.

29. I would add, only for the sake of completeness, that the criterion of the standard computer seems to me inappropriate for defining the term data processing. As the Court has repeatedly observed, the decisive criterion for the customs classification of goods must be sought generally in their objective characteristics and qualities, as defined in the relevant heading of the Common Customs Tariff and in the notes to the sections or chapters. [15] I do not think these requirements are met by taking the standard model as a criterion. The standard model depends too much on market conditions and on supply and demand and is liable to change quickly as time passes.

30. Even if the Commission points out that only the standard model at the date of importation of the goods has to be determined, this also seems to me to be a very difficult thing to do, even for an expert. The Commission goes on to refer to a judgment of the Court to the effect that the state of technology at the date of importation may be used as a criterion for the classification of goods. It is for the national court, where necessary with the assistance of an expert, to determine the state of technology at the time of importation. [16]

31. It must be said that this possibility is taken into consideration by the Court only if the Common Customs Tariff gives a 'relative criterion' [17] which refers, at least indirectly, to the usual technical possibilities existing in the electronics industry at the time of importation. Otherwise, it is for the competent authorities of the Community to take account of technical developments by amending the Common Customs Tariff. [18] It is questionable whether the concept of data processing is a relative criterion of that kind. However, it could be argued that the concept is relative in so far as only data processing corresponding to the state of the art is classifiable. In my view, however, the term 'state of the art' cannot then be compared to the term 'standard equipment' of a computer. An

15 — See the judgments in Case C-11/93, cited in footnote 5, paragraph 11, and in Case 200/84 *Daiber* [1985] ECR 3363, paragraph 13.

16 — See the judgment in Case 122/80 *Analog Devices* [1981] ECR 2781, paragraph 20.

17 — Ibid.

18 — See the judgment in Case 122/80, cited in footnote 16, paragraphs 13 and 20.

application of a data processing machine fully conforming to the state of the art will not necessarily belong to the standard equipment of a computer. That is why I think that the defining criterion proposed by the Commission is unsuitable.

32. Consequently, there appears to be nothing which would preclude classifying Vista Boards under heading 8471. Contrary to what the Commission contends, the heading would not become cluttered up if parts like Vista Boards were classified under it. It is clear from what the Commission says that systems designed for a single purpose are classified as a functional unit in accordance with that specific function. Machines with an individual function which only work in conjunction with an automatic data-processing machine or contain one are likewise not classified under heading 8471. It is therefore difficult to see why the classification of parts like Vista Boards, which are fitted into automatic data-processing machines in order to process data in them, should improperly encumber heading 8471.

33. This is particularly clear from the fact — which is not disputed — that part of the function of Vista Boards corresponds to the function of a normal graphics card which — this is also undisputed — must be classified under heading 8471. The additional function of Vista Boards — of converting and digitalizing external signals — is also part of the main functions of data processing as it makes it possible for the central unit to process data. The plaintiff in the main proceedings correctly observes that this function is comparable to that of the keyboard or the mouse. The question whether Vista Boards are, in addition, simply better-quality graphics cards or have a further function can, as I have already said, only be decided by the national court, if necessary with the assistance of an expert. If it were then shown that the functions of Vista Boards correspond to those of a media composer, they would have to be classified according to the specific function of video programme creation, in the same way as the media composer.

34. However, in view of the number of components listed in the product description of the media composer, it seems questionable whether a Vista Board, or the corresponding part in the media composer, as an individual component of the whole system, has the same functions as the system itself. According to the product description produced by the Commission, the system contains, in addition to the NuVista card which corresponds to the Vista Board, a central data-processing unit, two monitors, a keyboard, a particular type of software and, besides other cards, a sound card. The plaintiff's assertion that the Vista Board is not a special device for video productions also raises doubts. It points out that 'images' are not processed or handled in any way by the Vista Board; only as an additional function can it digitalize

electronic analogue impulses from video cameras and supports the computer in processing the digital data which are to be reproduced on the monitor. However, it is for the national court to undertake, with the assistance of an expert if necessary, a comparison of the functions of Vista Boards with those of a media composer.

C — Conclusion

35. I therefore propose that the Court should reply as follows to the questions from the national court:

Note 5(B) to Chapter 84 of the Common Customs Tariff (Combined Nomenclatures 1988-1991) is to be interpreted as meaning that the processing of images that can be carried out with Vista Boards is not to be regarded as a 'specific function' within the meaning of the abovementioned provision, i. e. not as a 'function other than that of data processing', so that those goods must be classified under heading No 8471 unless their functions correspond to those of a media composer which is designed to record digital video images, to produce video effects and for the montage of video programmes for broadcasting. The latter point must be determined by the national court, with the assistance of an expert if necessary.