



HARMONIZED SYSTEM
COMMITTEE

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O. Eng.

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CLASSIFICATION OF MULTIFUNCTIONAL DIGITAL COPIERS

(Item VII.18 on Agenda)

Reference documents :

42.406 (RSC/18)	NR0037E1 (RSC/19)
42.498 (RSC/18)	NC0059E1 (HSC/23)
42.500, Annex B/19 (RSC/18 – Report)	NC0090E2, Annex IJ/26 (HSC/23 – Report)
42.750, Annex E (HSC/22 – Report)	NC0160E2, Annex H/14 (HSC/24 – Report)
NR0023E1 (RSC/19)	NC0211E1 (HSC/25)
	NC0250E2, Annex H/13 (HSC/25 – Report)

I. BACKGROUND

1. At its 25th Session, the Committee continued its discussion on the classification of multifunctional digital copiers.
2. The Delegate of Brazil, while recognizing that this was a preliminary discussion, reiterated his contention that the machine presented by the Brazilian Administration by way of example, i.e., the Xerox Document Centre 230 DC, was classified in heading 90.09 by application of GIR 3 (b). Furthermore, he reminded the Committee that the machine in question contained a laser and a set of lenses which were used to create an image on the photoreceptor in order to produce a new image which would be revealed after being placed in contact with a chemical toner. In the view of the Delegate of Brazil, this was, in fact, an optical-electrostatic process of the type described in the Explanatory Note to heading 90.09.
3. The Delegate of Brazil informed the Committee that his administration wanted to replace the Xerox 230ST with the Xerox Document Centre 230DC, while maintaining the Xerox Document Centre 340ST on the list of products to be examined. He requested further technical information specific to each product.
4. Another delegate agreed with the Brazilian requests for further information, as well as the change in Xerox model numbers. He asked if it was known or could be determined whether the machines listed in paragraph 6 of Doc. NC0211E1 could work on their own, without being connected to an automatic data processing (ADP) machine. He felt it important to include in the study not only machines that could work on their own

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(standalone), even though they could be connected to an ADP machine, but also multifunctional machines that could work only when connected to an ADP machine.

5. The Committee agreed that the machines identified by the Secretariat in Doc. NC0211E1 were appropriate candidates for the study (subject to the substitution of the Xerox Document Centre 230 DC) and that the Secretariat's next document should include all classification possibilities, including headings 84.71, 84.72, 85.17, 90.09 and printing machines. The Committee left open the possibility for Contracting Parties to submit other products for the study should they deem it necessary. Contracting Parties were invited to submit written comments to the Secretariat on the classification of these machines.
6. On 2 June 2000, the Secretariat received a Note from the Brazilian Administration (see Annex I to this document) on the Xerox Document Centre 230 DC, containing the additional information its delegate had requested. The Secretariat, using this Note as a model, then requested corresponding information for the other products in the study. This information is set out in Annexes II to IX to this document. The Secretariat would also invite administrations to refer to Annexes X to XVI to this document for Notes containing classification opinions on multifunctional digital copiers submitted by various administrations.

II. SECRETARIAT COMMENTS

7. The Secretariat would remind the Committee that, while this document contains the additional information on these products requested by the Delegate of Brazil, Doc. NC0211E1 and its Annexes contain information that is also relevant to their classification. Annex I of that document provides a listing of the products in matrix format, including the functions they perform, their output, connectability to ADP machines and the type of scanner used. Annex II contains a visual picture of the products. Annex III, submitted by the industry, provides a comparison of light lens optical system technology and digital multifunction device optical system technology.

General comments

8. Before analyzing the classification of each product or group of products, the Secretariat would first like to re-visit comments it made on the general operation of multifunctional digital copiers set out in Doc. NC0211E1. Following this, the Secretariat will provide comments on the classification of each product. In paragraph 7 of Doc. NC0211E1, the Secretariat pointed out that, in its opinion, the type of scanner (i.e., flatbed or stationary scan bar) should not be determinative of the classification for these products. In this regard, what is important for classification purposes is the actual scanning method and the Secretariat referred to Annex III to Doc. NC0211E1 for a discussion on that point.
9. However, the Secretariat felt it was important to show that multifunctional machines can use various output technologies, but these would not affect the classification of such units. With this point in mind, the Delegate of Brazil was unsure as to the meaning of "output technologies" and, specifically, whether this was a reference to printing or photocopying. In any case, he pointed out that these "output technologies" could have an important role in the classification of these machines.
10. The Secretariat's comments in respect of "output technologies" were in reference to the marking technology, i.e., thermal, ink jet or laser, and not to printing or photocopying. The Secretariat had made its comments with a view to the fact that it considered the

determinative point for classification to be whether the machines were “photocopying apparatus incorporating an optical system“. However, during its research, the Secretariat was told that some multifunctional digital copiers (e.g., ink-jet and thermal machines) did not incorporate an optical system of lenses and mirrors for the printing operation and, as a result, would appear not to meet the terms of the text of heading 90.09. In this case, the “output technologies” would appear to be important for classification purposes.

General analysis

11. The text to heading 90.09 reads “**photo-copying apparatus incorporating an optical system or of the contact type and thermo-copying apparatus**”. The Explanatory Note to heading 90.09, page 1592, reads “**These apparatus incorporate an optical system (comprising mainly a light source, a condenser, lenses, mirrors, prisms or an array of optical fibres) which projects the optical image of an original document on to a light-sensitive surface, and components for the developing and printing of the image.**”
12. The Secretariat offers the following comments in relation to this text. The Secretariat interprets this text to mean that the “whole” image must be transferred by light onto the photosensitive drum and then projected onto the paper. This was the technology at the time the Note was drafted. With the multifunctional digital copiers at issue, the “whole” image is never transferred to the photosensitive drum. The original image is digitized, broken up into 1s and 0s and then this digital data is stored as a digital file in the machine’s memory. From this point, the user can manipulate this data, changing it as needed, and then transfer this digital file to the print engine (in the case of inkjet and thermal multifunction digital copiers, they do not have a photosensitive drum since the image is printed on the media). This would not appear to be the “photocopy” process that the Note was intended to cover. Such a system covered machines having to make continuous passes in order to output multiple copies. There was no capability for data manipulation. The machines at issue make one pass and then print multiple prints or store the data in a digital file to be used later (after data manipulation, if required) to make multiple prints.
13. The abovementioned Note also refers to a “light sensitive surface”. At the time of the drafting of this Note, the “light sensitive surface” was generally understood to refer to either a photosensitive drum or photosensitive paper. The CCD (charged coupled device) in a scanner is, in the Secretariat’s opinion, a “light-sensitive device” and, as such, cannot be interpreted to be a “light-sensitive surface” for purposes of heading 90.09. Regarding the process by which a scanner functions, the document/image to be “scanned” is illuminated by a “light source” and then, spot-by-spot, the CCD responds to the light reflected from the document/image at each spot as it is scanned. In turn, for each spot scanned on the document/image, the amount of light reflected is recorded as a digital number and the array of recorded digital numbers becomes the TIFF (Tagged Image File Format). Once the TIFF file of numbers is available, it can be manipulated/processed numerically in a variety of ways for use in representing/re-creating/rendering the document/image. The CCD and associated circuitry convert light to digital information which can be stored, manipulated, edited (modifying the entire item or doing pixel-level editing), e-mailed, added to a document, printed, etc. The scanning process, thus described, would seem to the Secretariat as not fitting the description in the Explanatory Note of projecting an “optical image” of an “original document” onto a “light-sensitive surface” and, consequently, classification in heading 90.09 would not be appropriate.
14. The Secretariat would point out that the scanners contained in multifunctional digital copiers are not used directly in making the “mark” onto the paper but, rather, are used as

input units for an ADP machine or as a bank for the fax component. The "optical system" in the photocopier is directly associated with the copy function.

15. The Secretariat understands that technological advancements occur constantly and that, as a rule, they do not automatically lead to a change in classification for a product. However, when the technological evolution takes a product into the purview of another heading, then a classification change may be necessary.
16. To this end, the Secretariat would point out that recent developments in information technology -- particularly in the processing of digital data -- have made it possible for manufacturers to enhance the capabilities of ADP printers. For example, when a modem connection is added, the printer can receive, process and print digital data received over public or private telephone systems, effectively mimicking the function of a facsimile machine. Increasingly, facsimile functions are being concentrated in external hardware, such as "modem banks" in web server computers. When a digital scanner is added to the printer, a "hard copy" document can be converted into digital form, and transmitted to other parts of the ADP system or network. Where the scanner is used in tandem with the print engine, the printer can print single or multiple documents from the scanned data without multiple passes by the scanner, effectively **mimicking** the function of "photocopying" through the processing of digital data. It should be noted that photocopiers work in "real time" as opposed to multifunctional digital copiers, wherein one's print job can be in a queue waiting its turn to be printed.
17. Multifunctional digital copiers are built around an electrostatic or ink-jet print engine. These print engines in all cases are coupled with or incorporate electronic controller boards (printed circuit board assemblies), which are designed to facilitate communication between the printer and the central processing units (CPUs) of automatic data processing machines. The CPU, operating a word processing, graphics, spreadsheet, electronic book, game or other software program, directs a stream of digital data to the print engine. This data is then processed by the controller board, which directs the print engine to fire a laser at a photoreceptor (or spray ink from a print head, depending upon the technology used), to create an image which is placed on, or transferred to, paper or other media.
18. The digital multifunction copier is capable of communicating with the CPU, advising the central processor of the status of print jobs, identifying the font being used (no choice in the case of photocopiers), notifying the processor of errors or problems in the print run, and of accepting print jobs from an electronic "queue". Such digital multifunction copiers are typically capable of advising the CPU concerning the paper tray being used for the print job, the type of paper being used, the status of paper supplies, and the diagnostic status of major printer components, such as photoreceptors and toner cartridges. In this connection, the Secretariat would point out that the enlargement and reduction of a document is not a manipulation of the original document, but rather a change in the focal point of the lens used in analog copiers (Light Lens Copier). It does not allow for changing the type of font or omitting/editing sections of the original document.
19. Digital multifunction copiers typically feature the necessary parallel and serial ports to permit interconnection directly to the CPU, or to facilitate connection to the CPU indirectly, through control and adapter units. These digital copiers are designed to be used as output units of ADP machines, replacing the traditional single function printer unit. Furthermore, digital multifunction copiers are specially engineered for connectivity to ADP machines.

20. While the earlier generation of ADP printers consisted of single function devices, the modern generation of printers features accessories which permit them to perform ancillary functions. Digital multifunction copiers will typically incorporate a digital scanner. The scanner permits "hard copy" documents to be processed through a raster output scanner (ROS) and converted into digital data, which can be stored and manipulated by the CPU. When the scanner is used in combination with the electrostatic print engine, the printer can be directed to print one or more documents from scanned, digitized data, effectively **mimicking** the function of photocopying by digital data manipulation. In addition, some digital multifunction copiers are equipped with a modem or are connected to a central modem bank and have the capability of sending or receiving digital data over public and private telephone lines, in the same manner as a facsimile transceiver. However, the scanning and digital copying capabilities of digital multifunction printers are subsidiary to these products' design intent and intended use as output units (printers) of ADP machines .
21. It is useful to note that most of the components and subsystems of these devices support this function (printing), including but not limited to the printer engine, the printer control, printed wiring board assembly (PWBA), paper handling systems, main printed wiring board assemblies, and backplanes, power supplies, memory wiring board assemblies, operator interfaces and covers. All of these subsystems, present in single function printers, are essential to ADP output uses, and account for the majority of the multifunction products' cost of manufacture. One estimate received from industry for the printing component on a laser scanner, laser printer, copier, fax machine was 75% for the printing component, 20% for the scanner and 5% for the fax component. For a machine comprising a printing component on a laser scanner, ink jet printer, copier, fax, the estimate was 70% for the printing component, 25% for the scanner and 5% for the fax (this corresponds to the OfficeJet 1175c).
22. Where a multifunction digital copier features a scanner, the scanner may also serve as an input device for the printer/print engine function. Scanned data can either be routed to the central processing unit of a computer system prior to being transmitted to a printer, or may be directed to a storage unit or component, from which it is then directed to the printer unit. In either case, the activity constitutes data processing -- the handling of information in pre-established logical sequences, for particular purposes. Multifunction digital copiers incorporating on-board scanners can also "mimic" the digital copying function, by utilizing two data processing elements in tandem -- a scanner (which, if imported separately, would be classified as an ADP unit of heading 84.71) and the print engine (which, if imported separately, would be classified as a part of an ADP machine under subheading 8473.30).
23. It is unlikely, however, that any purchaser seeking scanning or photocopying capability outside of an ADP machine or system would purchase a digital multifunction copier; dedicated standalone scanners and photocopiers having similar output speeds are available in the marketplace at far lower prices. In the same manner, it might be observed that virtually every facsimile terminal features the same subsystems -- an ROS scanner, which converts original documents into digital data, and a laser (or ink jet) print engine, which can be used to print the scanned data. In this way, facsimiles can be used to make digital photocopies, and most facsimiles contain "copy" controls on their keypads. However, to use a facsimile machine solely to make digital copies would be a waste of the device's resources. It would also disregard the device's telecommunications capabilities, and the fact that, by design and function, the device is intended to be used primarily, if not solely, to process digital data received by a modem from a telecommunications network. ADP printing remains

the primary design feature and intended use of these goods. The mere fact that a facsimile can be used to make digital copies does not render it, in the Secretariat's opinion classifiable, as a photocopier.

24. Before the Harmonized System Committee's 25th Session, the Secretariat received from the EC Delegate information on the "Xerox 3010 Editor". This machine was not included in the present study. However, the Secretariat believes that it is important to distinguish digital multifunction copiers from non-ADP connectable photocopying apparatus and similar devices with added functions. The "Xerox 3010 Editor" was one such device. The "Xerox 3010 Editor" was a dedicated digital photocopier, with facsimile transceiving capabilities, which was described as comprising "essentially a scanner, a digital memory and a laser printer". However, the term "laser printer" referred only to the presence of a laser print engine. The product was not capable of being connected to any automatic data processing machine, system or network. It did not meet the requirements set forth in Note 5(B) to Chapter 84 for classification as an automatic data processing unit. It featured no software drivers or hardware connection capabilities and, it would appear from the information provided, classification of the product under HS heading 84.71 was never considered. Multifunction digital copiers featuring connectivity to ADP systems, and meeting the definition of ADP "units" in Note 5(B) to Chapter 84 are materially and critically different from such goods.
25. It should be noted that whether a digital printing device is capable of being connected to an ADP system or network depends upon the fundamental systems architecture. The "Xerox 3010 Editor" was not capable of being connected to an ADP machine. Even if an attempt had been made to connect it to an ADP network, either directly or through another unit, the device would not have had the capability to send data, in the form of code or signals, to any other unit. It was an entirely self-contained apparatus.
26. During the discussion of multifunction digital copiers at the Committee's 25th Session, one delegate asked if it was known or could be determined whether the machines listed in paragraph 6 of Doc. NC0211E1 could work on their own, without being connected to an automatic data processing (ADP) machine. He felt it important to include in the study not only machines that could work on their own (standalone), even though they could be connected to an ADP machine but also multifunctional machines that could work only when connected to an ADP machine. The Secretariat was informed by industry representatives that, to their knowledge, other than the HP Mopier 320 (which required the "optional" scanner component in order to work standalone), all the multifunction composite machines on the market, such as the ones at issue, can work either "standalone" or connected to an ADP machine.
27. Based on paragraph's 12 to 14 above, the Secretariat would conclude that multifunction digital copiers do not meet the terms of heading 90.09 and, as such, are not classifiable in that heading. As these composite machines do not have a component of Chapter 90, Note 1 (m) to Section XVI does not apply. These composite goods contain components classifiable in Chapters 84 and 85 and, accordingly, Note 3 to Section XVI applies. Note 3 reads "**Unless the context otherwise requires, composite machines consisting of two or more machines fitted together to form a whole and other machines adapted for the purpose of performing two or more complementary or alternative functions are to be classified as if consisting only of that component or as being that machine which performs the principal function.**"

28. In trying to determine the principal function, the Secretariat notes that the machines have printing, scanning and faxing components. The printing device is used in conjunction with the fax when receiving a fax, as well as with the scanning device or is used as an output device of an automatic data processing machine. In addition, the printing component is, according to industry, the component which is used most frequently. On this basis, the Secretariat would conclude that the "printing function" provides the principal function. This would exclude these machines from classification in heading 85.17 as facsimile apparatus.
29. At the Committee's last session, the Committee decided that the Secretariat's next document would include all classification possibilities, including headings 84.71, 84.72, 85.17, 90.09 and printing machines. To this end, it is necessary to determine in which of these headings to classify a composite machine having "printing" as its principal function.
30. The general arrangement of Chapter 84 is such that headings 84.02 to 84.24 contain machines and apparatus which are classified mainly by reference to their function and headings 84.25 to 84.78 contain machines and apparatus which are classified by reference to the field of industry in which they are used. Bearing this in mind, it would appear to the Secretariat that heading 84.43 provides for printing machines of a kind used in the printing industry.
31. The Committee will recall its discussions, during the 25th Session, on the classification of the "Iris 3047" ink-jet printer, following a reservation from the Japanese Administration. The "Iris 3047" was a digital ink-jet printer which reproduced continuous-tone colour images, using variable-sized dots, on a wide range of media. It was used in the printing industry as a colour proofer and for industrial applications such as reflective or back-lit signage, exhibit displays, fine art, packaging, etc. The Committee confirmed the classification of the "Iris 3047" ink-jet printer in heading 84.43 (subheading 8443.51), rather than in heading 84.71, by application of GIR 1 (Notes 5 (B), 5 (D) and 5 (E) to Chapter 84). The Committee also confirmed the interpretation it had placed on Note 5 (D) to Chapter 84 at its 24th Session, as mentioned in paragraph 14 of Doc. NC0196E1 and as recalled during the discussion (i.e., the Committee agreed (Doc. NC0160E2, Annex G/16, paragraph 9 – HSC/24 – Report) that paragraph (D) of Note 5 to Chapter 84 was to be considered in the overall context of Note 5 and, consequently, for that paragraph's application, subparagraphs 5 (B) (b) and 5 (B) (c) **and** the introductory part to Note 5 (B) had to be read in conjunction).
32. It would seem to the Secretariat that the machines at issue, by their technical capabilities and application and sector of use (office environment), are markedly different from the "Iris 3047". The machines at issue perform a data processing function and are not, by their technical characteristics, specifically designed for the printing industry. In other words, there is not a "specific function" that would warrant classification in heading 84.43 by application of GIR 1 (Notes 5 (B), 5 (D) and 5 (E) to Chapter 84). Consequently, the Secretariat would not view the multifunction digital copiers at issue as printing machines to be used in the printing industry and, as a consequence, heading 84.43 would be ruled out.
33. Headings 84.69 to 84.72 provide for office equipment. As the machines at issue fulfil the requirements of Note 5 (D) to Chapter 84, the Secretariat would be inclined to classify these multifunction digital copiers as output units of an automatic data processing machine (printer) under subheading 8471.60, by application of Note 3 to Section XVI. This would preclude them from classification in heading 84.72.
34. If, however, the Committee agrees with the Secretariat that these multifunction digital copiers do not meet the terms of heading 90.09 but it decides that it is not possible to

determine the principal function of these composite machines, then GIR 3 (c) would apply (see the General Explanatory Note to Section XVI, page 1227, 2nd paragraph). In such a case, since these goods contain a printer and scanner, both of which are classifiable in heading 84.71 and facsimile apparatus classifiable in heading 85.17, they would be classified in heading 85.17 by application of GIR 3 (c).

35. Should the Committee decide that some or all of the composite machines at issue have a photocopying component of heading 90.09, then the legal basis would be General Interpretative Rule (GIR) 3 (b) or 3 (c) and not Note 3 to Section XVI. In examining Note 3 to Section XVI, the Secretariat understands that this Note has been used to classify machines of Chapters 84 and 85 and not of Chapter 90. Consequently, GIR 3 would provide the legal basis. In this case, the Secretariat would put forward the view that the essential character of the composite machines would be determined by the “printing” component, taking into account the Secretariat’s comments in paragraph 21 regarding component cost, as well as the industry’s assertion that it is the printing component that receives the most use.
36. Finally, the Committee may also come to the view that the digital process is a further technological development of the “photocopying” process. If this were the case, then classification in heading 90.09, by application of GIR 1 and 3 (b), would seem to be appropriate. The Secretariat would point out that, in such a case, it would be necessary to view the scanning and printing functions as being combined to form the photocopying function and that this photocopying function would then predominate over the “faxing” function.

Analysis of specific products

1. HP Mopier 320

37. The HP Mopier 320 is a multifunctional digital copier, being modular in design, and consisting of a printer, scanner and paper handling input and output unit. The customer can configure the unit any number of ways either at the time of purchase or after the purchase. The printer is the base unit. A scanner can be added but is a separate unit. Various input and output (sort, staple) paper handling units can be added. According to the manufacturer, the printing component will always make up more than 60% of the cost of the finished unit.
38. Unlike the Xerox Document Centres (230 and 340) and the Océ 3133, the scanner component in the HP Mopier 320 is an “option” which the user can buy either at the time of purchase or at a later date. The HP Mopier 320 is connectable via a network cable, direct interface with a Personal Computer (PC) via an IEEE-compliant bi-directional parallel cable or local remote printing. Walk-up “digital copying” can only be accomplished with the scanner component attached. It does not have a facsimile capability.
39. As the scanner component is an “option” and, as there is no facsimile capability in the opinion of the Secretariat, the base unit should be classified in heading 8471.60, as an output unit of an automatic data processing machine (printer), by application of General Interpretative Rule I. Should the scanner be imported with the base model, thereby enabling walk-up “digital copying”, then the machine would be classified as a composite machine whose functions would include printing, scanning and copying.
40. The Secretariat, in paragraphs 12 to 14, analyzed the operation of the multifunction digital copiers in relation to the heading text of 90.09. The Secretariat concluded that these multifunction digital copiers did not meet the requirements of heading 90.09 and, as a result,

classification in that heading was not warranted. In the Secretariat's opinion, (see paragraph 28), the printer component would impart the product's principal function. Accordingly, the Secretariat would classify the HP Mopier 320 with scanner as an output unit of an automatic data processing machine (printer) under subheading 8471.60, by application of Note 3 to Section XVI.

2. Océ 3133 and Xerox Document Centre 340 ST

41. Both of these units are multifunctional digital copiers and are modular in design. They are sold with printing, scanning, faxing and "digital copying" capability. As such, they are composite machines. The Secretariat, in paragraphs 12 to 14, analyzed the operation of multifunction digital copiers in relation to the text of heading 90.09. The Secretariat concluded that these multifunction digital copiers did not meet the requirements of heading 90.09 and, as a result, classification in that heading was not warranted. In the Secretariat's opinion (see paragraph 28), the printer component would impart the product's principal function. Accordingly, the Secretariat would classify the Océ 3133 and Xerox Document Centre 340 ST as output units of an automatic data processing machine (printer) under subheading 8471.60, by application of Note 3 to Section XVI.

3. Xerox Document Centre 230 DC

42. The Xerox Document Centre 230 DC is a component system consisting of two physically-distinct components (an Image Output Terminal (IOT) and a Digital Document Scanner (DOT)) and four major boards (each of which has, at a minimum, its own dedicated processor and memory). A fifth major board (Network Printer Controller Board) is added if the 230DC is upgraded to function as a networkable multifunction machine.
43. The Xerox Document Centre 230 DC is a device that is designed to be connected to an ADP system. In fact, based on the description from the manufacturer, the 230 DC contains a ribbon-cable connection on the laser printer controller board to which a PC (not a LAN) could be directly connected. However, this device could be connectable (by addition of a network printer controller board) to a LAN.
44. At importation, this model is capable of performing "digital copying", faxing and scanning. If the user wants to connect the machine to a PC in order to print, a plug must be opened in order to connect the ribbon-cable connection on the laser printer controller board to the PC. The Secretariat leaves it to the Committee to decide whether the fact that the means exist to connect the Xerox Document Centre 230 DC to a PC is sufficient to say that this machine has a printing function. If this is the case, the Secretariat believes it could be classified as an output device for an automatic data processing machine (printer), under subheading 8471.60, by application of Note 3 to Section XVI. If the Committee believes that this machine at the time of importation is only capable of faxing, copying and scanning, then it could be classified in subheading 9009.12 or 9009.21, by application of GIR 3 (b) or 3 (c), depending on whether the Committee can determine the component which gives the machine its essential character.

4. HP OfficeJet Pro 1175c (all-in-one), Brother MFC-8600 and Brother 1970mc

45. These are all desktop multifunction machines. The HP OfficeJet 1175c is an inkjet unit using a flatbed scanning device. The Brother MFC-8600 is a laser-based unit using a fixed-position scanning device (stationary scan bar) and the Brother 1970mc is a thermal unit using a stationary scanning bar. The latter unit has a telephone hand set attached for faxing

purposes. In the Secretariat's view, what is important for classification purposes is that the machine has a facsimile component. The presence or absence of a telephone hand set does not make the facsimile component any more or any less important.

46. The Secretariat, in paragraphs 12 to 14, analyzed the operation of multifunction digital copiers in relation to the text of heading 90.09. The Secretariat concluded that these multifunction digital copiers did not meet the requirements of heading 90.09 and, as a result, classification in that heading was not warranted. In the Secretariat's opinion (see paragraph 28), the printer component would impart the product's principal function. Accordingly, the Secretariat would classify the HP OfficeJet Pro 1175c (all-in-one), Brother MFC-8600 and Brother 1970mc as output units of an automatic data processing machine (printer) under subheading 8471.60, by application of Note 3 to Section XVI.

III. CONCLUSION

47. The Committee is requested to examine the classification of multifunctional digital copiers, and specifically the HP Mopier 320, the Océ 3133, the Xerox Document Centre 340 ST, the Xerox Document Centre 230 DC, the HP Office Jet Pro II 75c, the Brother MFC-8600 and the Brother 1970mc, on the basis of the information provided on Annexes II to IX to this document, the comments of administrations in Annexes I and X to XVI to this document, and the analysis of the Secretariat in paragraphs 7 to 46 above.

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NOTE FROM THE BRAZILIAN ADMINISTRATION

THE XEROX DOCUMENT CENTER 230 DC

This machine is a multifunctional digital copier (DC is “digital copier”. Its design is modular, i.e., the user can add options to the “basic” machine at any time.

The basic Xerox 230 DC scans the original document, digitizes it and then copies it by means of a laser-optical-electrostatic process. The basic machine can become multifunctional by adding the faxing function, to receive and send faxes, and the printing function, if the product is connected to an automatic data processing (ADP) machine. The Xerox 230 DC operates without being connected to an ADP machine or network. When it is connected to a computer or network, and so incorporates the printing function, it becomes the Xerox 230 ST.

The scanning function is performed by a flatbed scanning device, which can be optionally a duplex (a duplex scanner can scan both faces of a document simultaneously). The copy and fax functions (both sending and receiving) can also be duplex. The scanning resolution is 400 x 400 dots per inch (dpi) and the scanning speed is 30 pages per minute (ppm) for an 8.5 inch x 11-inch page size. Up to 30 originals can be scanned at one time. If the duplex is used, up to 50 two-sided originals can be scanned at one time. The document sizes to be scanned range from between 5.5 inches x 8.5 inches and 11 inches x 17 inches.

The fax sending function is programmable for a 200-number dial directory and speed dials. The user can program the fax numbers he wishes to send to, load the originals and start to scan them at rated speed. The machine will send the scanned faxes automatically. The fax documents’ sizes range between 8.5 inches x 11 inches and 11 inches x 17 inches. The resolution of the fax printer is 400 x 400 dpi. Its modem speed is 14,400 bits per second, i.e., it takes seven seconds to receive or send one page.

The standard digital memory of the machine is 10 MB, which can store up to 50 pages of 8.5 inch x 11 inches page size. There is an optional hard disk with 250-MB storage capability, which can store up to 50 pages of 11 inch x 17-inch page size.

The zoom reduction/enlargement varies from 25% to 400% in 1% increments.

Regarding the copying function, the first copy is produced in 4.7 seconds after the original is placed on the platen. The copy speed is 30 ppm (8.5 inch x 11 inch), 17 ppm (8.5 inch x 14 inch) or 14 pages per minute (11 inch x 17 inch). The maximum copy resolution in black/white is 600 x 600 dpi. The copy selector can handle 1 – 250 paper sheets. The front loading trays can receive up to 500 sheets. There is an optional high capacity feeder for 2,000 sheets.

The machine's dimensions are about 39.8 inches x 29.2 x 43.1 inches (about 101 cm x 74 cm x 110 cm) and its weight is about 250 pounds (about 112.5 kilos).

With regard to the digital copy technology of this equipment, we would like once more to sum up its main points. The original document is scanned and converted into digital data. The digital data is stored in the machine's memory and can be treated by image processing technology to enhance the image. The image is then directed to a photoreceptor by a laser

reflected through an optical system of mirrors and lenses imparting an electrical charge to the photoreceptor. The photoreceptor is then exposed to a toner material, which is attracted to oppositely charged areas on the photoreceptor corresponding to the directed image. This creates an electropositive image, which is then transferred to a paper sheet and fused onto it.

The digital technology enables this machine to separate the image in text, graphics and photo mode and treat each part separately, in order to attain a better quality reproduction.

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Xerox Document Centre 230 DC

The Xerox model 230 DC is a digital printing terminal, capable of being connected, through an electronic subsystem or "Network Printer Controller" board, to the central processing unit ("CPU") of an automatic data processing machine. It is designed to accept and deliver data in a form (code or signals) which can be understood by the CPU. Even when not connected to, or communicating with a CPU, it can print data from digital files, including files created through the scanning of "hard copy" documents on its self-contained scanner unit. Using an optional facsimile board, the 230 can also transmit and receive facsimile messages across public or private telephone lines.

As imported, the Xerox Model 230 DC is a multifunctional data input/output terminal, which is composed of two close-coupled modules:

(1) An Image Output Terminal (IOT), which incorporates all of the printing and paper handling components of the 230 ST. These include a monochromatic digital laser printing engine capable of printing 30 pages per minute (30 ppm), a number of paper trays, a paper path, a photoreceptor drum and a fuser assembly. The IOT houses digital electronic data processing systems, which control and operate the 230. These include a Laser Printer Controller PWBA (printed wire board assembly), as well as a Scanner Image Processing PWBA, and

(2) A Digital Document Scanner, incorporating a document feeder paper path, and an image input terminal (IIT), which uses raster scanning technology to create digital "bitmap" files of scanned original documents. These files can then be processed by the IOT, or, when the 230 is connected to an ADP system, by the CPU of such a system.

As noted above, the Xerox 230 DC can connect to the CPU of an automatic data processing system or network, through a Network Printer Controller Board.

The 230 DC receives, processes, and at the operator's instruction, prints digital data files. Its IOT component, when sold without the scanner, is basically identical to the Xerox 230 LP, a dedicated laser printer, used with computer networks. The IOT is a 30 page per minute indirect process electrostatic laser printing engine which receives all print jobs in the form of binary digital data files, and converts them into a hard copy printed form, using two or more board-level electronic data processing systems.

The Scanner Image Processing PWBA, contained in the IOT, is a board-level electronic data processing system, which handles communication and control functions between the scanner, the Laser Printer Controller PWBA, the IOT and an optional fax subsystem, and generates all reports concerning the status of the 230 DC. It incorporates an Electronic Pre-Collation Memory (EPC), which enables the "scan once, print many" feature of the 230 DC by storing and collating digital page images in memory. The EPC memory (having a standard capacity of 250 megabytes, subject to expansion) is used to store digital files created by the 230 DC's self-contained digital scanner, as well as facsimile printing.

An optional Group 3 (G3) facsimile board may also be added to the Scanner Image Processing Board for the 230 product. The Scanner Image Processing board contains direct memory access capability, a Motorola 68000 microprocessor, video compression and expansion memory capability as well as a Network Connection Unit (the NCU provides isolation and protection between the fax board and the telephone network).

The Laser Printer Controller PWBA, also contained in the IOT, is a printed wiring board assembly which controls the paper path of the print engine, the laser writing process, and controls the operation of the laser print engine.

The 230 DC also features a cable-connected Digital Document Scanner. The scanner, which is identical to scanners commonly found in facsimile machines or sold as separate input terminals for automatic data processing systems, converts "hard copy" documents into digital data files by using a linear array of photosensors to measure the light intensity areas on the scanned document. The resulting digital data file is usually expressed in a Tagged Image File Format (TIFF) or similar electronic format for printing. A central processor in the image output terminal controls an application-specific integrated circuit (ASIC), retrieves the scanned data from the electronic pre-collation memory (EPC) in the Scanner Image Processing Board, compresses the data, and routes the compressed file to the Laser Printer Controller board, from which it can be printed, using the laser printing engine.

The 230 was designed from its earliest planning stages to be used as the print terminal for an automatic data processing machine or system. Connection to a CPU is effected through a Network Printer Controller board, which contains a powerful RISC data processor, and which is capable of supporting numerous computer operating system and page description languages (PDLs) used in printing. The ESS supports a variety of computer print drivers, such as Microsoft Windows 3.X, 95, and NT 4.0, Macintosh 7.x, MacPPD for Laser Writer 7.5.5, 7.6.1 or 8.x, and OS/2 Warp. The 230 ST Terminal also contains various print submission tools for Adobe PostScript, such as Unix AIX, HP-UX9.x and 10.x, and Solaris 1.0 and 2.4 +, and supports connectivity with computer systems utilizing various operating systems, including those manufactured by Novell, Microsoft, Apple, Banyon and TCP/IP.

When the Network Printer Controller PWBA is connected to the 230 terminal, the 230 DC becomes the 230 ST and can accept print jobs from ADP machines, networks, and the Internet (indeed, the 230 ST contains an embedded Web Server), and can communicate its readiness status to all network users. The 230 ST can also be used for "media printing", accepting and printing data from a built-in floppy disc drive. Media printing jobs can be routed from the disc drive either directly to the print engine (bypassing the CPU) or can be processed through the CPU, provided the files to be printed are in a recognized "Page Definition Language" (PDL) software format.

When the 230 is used to immediately convert a scanned document to printed output, this printing process is sometimes referred to as "digital copying". However, the product does not incorporate the "light lens" technology of the photocopier, but instead prints documents solely from digital data files. It performs a digital printing function.

One of the more important general features of the 230 platform's architecture is the modularity of its subsystems. Each has its own intelligence enabling a high degree of independent operation. For example, modular architecture provides greater concurrency, enabling different functions (printing, faxing, scanning) to be going on at the same time. In

addition, the “scan once print many” architecture of the 230 means greatly reduced handling of paper, with far fewer jams.

The 230 can perform “1-N printing”. The system does not have to wait until it has received all the pages of the document before it can start printing. Rather it can process and start printing a document as soon as it receives its first page. There can be paper coming out of the system even before the entire file has been transmitted or scanned.

The Xerox 230 print engine output resolution is 600 x 600 dpi, giving crisp resolution and clarity to printed documents. Overall, the Document Centre 230 provides customers with a unique combination of sophisticated document processing services.

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Xerox Document Centre 340 ST

The Xerox model 340 ST is a digital multifunction printing terminal, designed to be connected, through its incorporated electronic subsystem or "Network Printer Controller" board, to the central processing unit ("CPU") of an automatic data processing machine. It is designed to accept and deliver data in a form (code or signals) which can be understood by the CPU. Even when not connected to, or communicating with, a CPU, it can print data from digital files, including files created through the scanning of "hard copy" documents on its self-contained scanner unit. Using an optional facsimile board, the 340 can also transmit and receive facsimile messages across public or private telephone lines.

As imported, the Xerox Model 340 ST is a multifunctional data input/output terminal, which is composed of two close-coupled modules:

(1) An **Image Output Terminal (IOT)**, which incorporates all of the printing and paper handling components of the 340 ST. These include a monochromatic digital laser printing engine capable of printing 40 pages per minute (40 ppm), a number of paper trays, a paper path, a photoreceptor drum and a fuser assembly. The IOT houses digital electronic data processing systems, which control and operate the 340. These include a **Laser Printer Controller PWBA** (printed wire board assembly), a **Scanner Image Processing PWBA**, and the aforementioned **Network Printer Controller Board**; and

(2) A **Digital Document Scanner**, incorporating a document feeder paper path, and an image input terminal (IIT), which uses raster scanning technology to create digital "bitmap" files of scanned original documents. These files can then be processed by the IOT, or, when the 340 ST is connected to an ADP system, by the CPU of such a system.

The 340 ST receives, processes, and at the operator's instruction, prints digital data files. Its IOT component, when sold without the scanner, is basically identical to Xerox' high-speed laser printer, which is designed exclusively for work with computer networks. The IOT is a 40 page per minute indirect process electrostatic laser printing engine which receives all print jobs in the form of binary digital data files, and converts them into a hard copy printed form, using two or more board-level electronic data processing systems.

The **Scanner Image Processing PWBA**, contained in the IOT, is a board-level electronic data processing system, which handles communication and control functions between the scanner, the Laser Printer Controller PWBA, the IOT and an optional fax subsystem, and generates all reports concerning the status of the 340 ST. It incorporates an Electronic Pre-Collation Memory (EPC), which enables the "scan once, print many" feature of the 340 ST by storing and collating digital page images in memory. The EPC memory (having a standard capacity of 250 megabytes, subject to expansion) is used to store digital files created by the 340 ST's self-contained digital scanner, as well as for facsimile printing.

An optional Group 3 (G3) facsimile board may also be added to the Scanner Image Processing PWBA for the 340 product. The Scanner Image Processing board contains direct memory access capability, a Motorola microprocessor, video compression

and expansion memory capability as well as a Network Connection Unit (the NCU provides isolation and protection between the fax board and the telephone network).

The **Laser Printer Controller PWBA**, also contained in the IOT, is a printed wiring board assembly which controls the paper path of the print engine, the laser writing process, and the operation of the laser print engine. This subsystem allows printing to take place on paper in a variety of sizes, ranging from letter size paper to 11"x 17" sheets, including single-sided and duplexed (two-sided) printing.

In addition, the 340 ST was designed from its earliest planning stages to be used as the printer for an automatic data processing system or network. Interface with a CPU is effected through the **Network Printer Controller PWBA**, which is also housed in the IOT. This board contains a powerful **RISC data processor**, and which is capable of supporting numerous computer operating systems and page description languages (PDLs) used in printing. The ESS supports a variety of computer print drivers, such as Microsoft Windows 3.X, 95, and NT 4.0; Macintosh 7.x, MacPPD for Laser Writer 7.5.5, 7.6.1 or 8.x, and OS/2 Warp. The 340 ST Terminal also contains various print submission tools for Adobe PostScript, such as Unix AIX, HP-UX9.x and 10.x, and Solaris 1.0 and 2.4 +, and supports connectivity with computer systems utilizing various operating systems, including those manufactured by Novell, Microsoft, Apple, Banyon and TCP/IP.

The Network Printer Controller PWBA allows the Xerox 340 ST to accept and process print jobs from ADP machines, networks, and the Internet (indeed, the 340 ST contains an embedded Web Server), and can communicate its readiness status to all network users. The 340 ST can also be used for "media printing", accepting and printing data from a built-in floppy disc drive. Media printing jobs can be routed from the disc drive either directly to the print engine (bypassing the CPU) or can be processed through the CPU, provided the files to be printed are in a recognized "Page Definition Language" (PDL) software format.

The 340 ST also features a cable-connected **Digital Document Scanner**. The scanner, which is identical to scanners commonly found in facsimile machines or sold as separate input terminals for automatic data processing systems, converts "hard copy" documents into digital data files by using a linear array of photosensors to measure the light intensity areas on the scanned document. The resulting digital data file is usually expressed in a Tagged Image File Format (TIFF) or similar electronic format for printing. A central processor in the IOT controls an application-specific integrated circuit (ASIC), retrieves the scanned data from the electronic pre-collation memory (EPC) in the Scanner Image Processing Board, compresses the data, and routes the compressed file to the Laser Printer Controller board, from which it can be printed, using the laser printing engine.

When the 340 ST is used to immediately convert a scanned document to printed output, this printing process is sometimes referred to as "digital copying". However, the product does not incorporate the "light lens" technology of the photocopier, but instead prints documents solely from digital data files. It does not reflect the optical image of an original document onto a photosensitive surface; rather, it uses a stream of digital data to fire a laser, which charges a photoreceptor in the print engine.

One of the more important general features of the 340 platform's architecture is the modularity of its subsystems. Each has its own intelligence enabling a high degree of independent operation. For example, modular architecture provides greater concurrency,

enabling different functions (printing, faxing, scanning) to take place at the same time. In addition, the “scan once print many” architecture of the 340 means greatly reduced handling of paper, with far fewer jams.

The 340 can perform “1-N printing”. The system does not have to wait until it has received all the pages of the document before it can start printing. Rather it can process and start printing a document as soon as it receives its first page. There can be paper coming out of the system even before the entire digital file has been transmitted or scanned.

The Xerox 340 ST scans **at 600 x 600 dpi**, which is equal to its print engine output resolution of **600 x 600 dpi**, giving crisp resolution and clarity to printed documents. Overall, the Document Centre 340 ST provides customers with a unique combination of sophisticated document processing services.

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Xerox Document Centre 340 ST Enhancements

The Document Centre 340 builds on the capabilities of the Document Centre 230 to deliver benchmark productivity.

Table 1-2: Enhanced capabilities of Xerox Document Centre 340 ST

Feature	Document Centre 230	Document Centre 340	Key Advantage
Print			
Print speed Letter A4 Legal 11x17	<ul style="list-style-type: none"> ▪ 30 ppm ▪ 30 ppm ▪ 17 ppm ▪ 14 ppm 	<ul style="list-style-type: none"> ▪ 40 ppm ▪ 40 ppm ▪ 24 ppm ▪ 20 ppm 	<ul style="list-style-type: none"> ▪ Faster throughput results in less wait time, increased productivity
Duplexing productivity	75% of simplex	93% (332) and 80% (340) of simplex	<ul style="list-style-type: none"> ▪ Faster throughput results in less wait time, increased productivity ▪ May increase tendency to duplex, reducing paper usage
Resolution	400 dpi	600 dpi	<ul style="list-style-type: none"> ▪ Sharper images increase a document's readability thereby eliminating potential errors (especially when interpreting fine-line drawings and photographs)
First print-out time	4.7 seconds	3.9 seconds	<ul style="list-style-type: none"> ▪ Less time waiting, increased productivity
Warm-up time	59 seconds	55 seconds	<ul style="list-style-type: none"> ▪ Less time waiting, increased productivity
Maximum print count	250	999	<ul style="list-style-type: none"> ▪ Very large jobs can be executed with a single request (vs. multiple requests to achieve more than 250 sets)
Media print hard disk drive	Optional	Standard	<ul style="list-style-type: none"> ▪ Handles the maximum number of pages and complex images that can be copied or faxed as a single job ▪ Improves processing speed for electronic pre-collation, fax memory storage (incoming and outgoing), and page memory
Edge annotation	Lead edge only; 16 characters; start at page 1	Annotation on any edge of 8.5x11/A4 (lead/trail edge only for sizes > 8.5x11/A4); left, center or right; portrait or landscape; up to 20 characters; small or large fonts; 8 custom annotation fields; start page any #	<ul style="list-style-type: none"> ▪ Annotations can be added to a greater variety of page layouts without risk of overlapping images ▪ More explicit annotations can be added to documents ▪ Document sets can be added onto with continuous page-numbering

Feature	Document Centre 230	Document Centre 340	Key Advantage
Fax			
Fax transmission speed	14.4 Kbps (G3)	33.6 Kbps (Super G3)	<ul style="list-style-type: none"> ▪ Higher speed fax transmission reduces phone costs and increases productivity
Simultaneous fax in and fax out	No	Option to add a second analog fax line for dual transmissions.	<ul style="list-style-type: none"> ▪ Improves customer satisfaction by reducing fax bottlenecks. ▪ Higher speed fax transmission reduces phone costs and increases productivity
ISDN fax support	No	Optional ISDN digital fax line connectivity (enabled via external adapter)	<ul style="list-style-type: none"> ▪ Higher speed fax transmission reduces phone costs and increases productivity ▪ Accommodates customers who have converted to completely digital installations
Fax mailboxes	Up to 30	Up to 200	<ul style="list-style-type: none"> ▪ Employees, even in large workgroups, can each have their own mailbox for secure fax reception
Secure Fax Receive	No	Key operator can turn off printing of received faxes. Incoming faxes are stored until service is enabled again	<ul style="list-style-type: none"> ▪ Prevents printing of sensitive materials during off-hours when appropriate personnel are not present to ensure security
Scan			
Scan-to-file formats	TIFF	Three file output options: <ul style="list-style-type: none"> ▪ TIFF ▪ Multi-page TIFF ▪ PDF 	<ul style="list-style-type: none"> ▪ Multi-page images can be scanned into a single TIFF file for easy storage/e-mailing ▪ Scanned images are more universally acceptable (PDF) ▪ PDF supported by CentreWare Internet Services

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HP MOPIER 320

This machine is a multifunctional digital printer. Its design is modular, i.e., the user can add options to the “basic” machine at any time.

The basic HP Mopier 320 produces multiple original prints (mopies) of paper documents that are electronically created, stored, shared and distributed. Today's office is a digital workplace where the print-copy-distribute approach is being transformed. Increasingly, documents are electronically distributed to individuals to print, send, copy or further distribute as needed. The HP Mopier brings the required functions together in one scalable, upgradeable network device with familiar interfaces that everyone can quickly learn. It lets users print quality multiple original documents from the desktop with ease. It also provides walk-up copying from paper source originals as well as digital sending capabilities within the workgroup. Its flexible, modular design lets the customer choose the best solution for today, with more options to adapt as needs change.

The printing function is performed by a fast, 32-page-per-minute, laser printer. Print resolution is 1200 dots-per-inch interpolated with HP FastRes 1200. Duplex printing is included and the printer duty cycle is 150,000 pages per month. Standard print languages are HP PCL 6, HP PCL 5e and PostScript Level 2 emulation. Typeface choices come from 110 TrueType scalable fonts. Network connectivity is provided with the HP JetDirect 600N internal print server for Ethernet 10/100Base-TX and EtherTalk. Printer management is made easy and efficient with HP Web JetAdmin. Automatic language switching, automatic I/O switching and automatic network switching are included as standard features. The standard digital RAM memory of the machine is 48 MB. Also included is a hard disk drive with 2.1-GB storage capacity.

The typical hardware configuration provides up to five input sources of media with a total capacity of 3100 sheets. Standard are two 500-sheet trays plus a single 100-sheet multipurpose tray. Optional are a single additional 2000-sheet tray or two additional 500-sheet trays. Up to 100 envelopes can be handled with the optional envelope power feeder. Media sizes from 3.9 x 7.5 inch up to 11.7 x 17.7 inch can be accommodated. Standard output capacity is 600 sheets with a 500-sheet face down top tray and a 100-sheet face up side tray. Additional output capacity and document finishing are available with the optional 3000-sheet stacker or stacker/stapler.

When needed, the scanning function for digital sending and copying of paper source documents is provided by a scanning device that includes both flatbed and automatic document feeder. Scanning resolution is 600 x 600 dots per inch (dpi) and the automatic document scanning speed is 32 pages per minute with letter/A4 simplex originals. Single-pass duplex scanning is provided by a dual scan bar configuration within the automatic document feeder mechanism. Up to 50-sheet single-pass duplex input can be handled at 20-lb bond paper weight. First-page-out time for the copy function is 17 seconds. The digital sending function rapidly converts paper source documents to digital format to transmit to any e-mail address while controlling confidentiality. It includes an intuitive interface, auto-address completion and smart compression technology to send quickly and easily. Image type and quality settings are made by the user. File formats are PDF, TIFF and MTIFF.

Connection to the HP Mopier 320 is normally made via a network cable to access all Mopier 320 capabilities. However, direct interface with a Personal Computer (PC) can also be made via an IEEE-compliant bi-directional parallel cable. This connection uses the parallel port on the PC for local printing without the HP JetDirect network interface card being required. Another connection for local remote printing from the PC can be made via an optional HP Infrared Connect accessory. This latter connect scheme provides for cable-free printing from palmtop and laptop PCs.

The machine's dimensions when fully configured are about 43 x 25 x 64 inches (about 110 x 64 x 163 centimeters) and its weight is about 348 pounds (about 157 kilos).

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HP OFFICEJET PRO 1175C

The HP Officejet Pro 1175C is an integrated color printer-copier-scanner introduced in December 1997 and discontinued in spring 1999. It is no longer being produced or sold.

The 1175C is a desktop machine measuring 19.0 inches high, 21.3 inches wide, 17.7 inches deep and weighing 37 lbs. It is aimed at the small office or home office market. It is a fully digital machine with printing, copying, scanning and software assisted FAXing capability. It was sold with two basic configurations: the HP1170C had a plain lid on top of the scanner bed, while the 1175C had an automatic document feeder.

PRINTING

The 1175C uses HP Inkjet printing technology. Based on the Quinault print mechanism, it uses one black and one tri-color ink cartridge. It has 600X600 DPI black and 600X600 DPI color printing capability. It can print 9 ppm black and 5 ppm color in econofast (fast, less ink) mode; 4 ppm black 1 ppm color in best quality mode. The printer command set is **HP PCL3** (Printer Control Language.) It incorporates **HP Ret Black** and **HP PhotoRet II** technology, which provide photo-quality, detailed, fast color printing on any type of paper. It also incorporates **HP FontSmart**, a font management utility for handling TrueType, Type 1 and Bitmapped fonts.

The 1175C can print on a wide range of media sizes, including letter, legal, and envelopes. It can print with excellent color and resolution on plain paper, bright white inkjet paper, photo paper, transparency film, and iron-on T-shirt transfer.

SCANNING

In addition to its printing capability, the 1175C had an integral scanner allowing it to digitize documents or portions of documents to be imported into the PC to be used in a variety of ways. The scanner is a flat-bed type which can accept documents up to letter size in width or A4 size in length. The scanning mechanism is a single line Charge-Coupled Device (CCD) which is moved over the length of the scan bed by a motorized carriage system. The scanner has 300 DPI optical resolution, but with PC assistance, it can have up to 1200 DPI enhanced resolution. It is capable of 30-bit color scanning (16.7 million colors) and 8 bit monochrome scanning (256 levels of gray.) HP-developed technology allows very simple installation and use of the scanning capability of the 1175C. A bi-directional Centronics parallel interface is used for all communication with the 1175C and no other special interface cards are required. Driver installation for Windows 95 allows users to easily acquire, manipulate and integrate images from within 32-bit Windows 95 applications.

The 1175C was sold with several software packages which greatly enhanced the usability of the product. **Caere OmniPage LE** is an Optical Character Recognition (OCR) software package that converts a text document into electronic format. This allows a user to rapidly convert a printed document into format that can be edited, stored, Emailed, Faxed, etc. **Adobe PhotoDeluxe** is an image editing/manipulation program that allows a user to easily take a scanned image and view it, change colors, enlarge or reduce, enhance features, change intensity, etc.

COPYING

Another capability of the HP1175C is the ability to send the output of the digital scanner directly through the image processing electronics to the print mechanism, resulting in fast, accurate image reproductions (copies.) Reproduction speed ranges from 9 CPM black and 3 CPM color in econofast mode to 3 CPM black and 0.8 CPM color in best quality mode. The 1175C has a default setting of 100% (full page reproduction) but output can be scaled from 25% to 400%. The default setting is for one copy, but the user can select up to 50 reproductions. The HP 1175C has a document feeder on the scanner bed. (The HP 1170C is the same product with a simple lid on the scanner bed.) The document feeder can handle up to 30 originals when making reproductions. Some basic reproduction settings (# of copies, intensity, paper type, etc.) can be set through the control panel, but the full capability of digital reproduction is only realized by using HP **CopySmart II** software. **HP CopySmart II** allows the user to access powerful reproduction capabilities such as super-zoom, poster, clone, and mirror copy modes.

PC-FAXING

The HP1175C does not have any FAX electronics or any stand-alone FAX capability. It is sold with **HP Integrated Digital Document Communications** software that enables documents to be sent to any FAX number, E-mail address or Internet location via the FAX electronics in the PC. There is a "Scan to FAX" button on the control panel which launches the PC-FAX software on the PC. The PC-FAX software can also be started directly from the PC.

SYSTEM

The HP1175C is compatible with Microsoft Windows 95, 98, and NT, with basic support for Windows 3.1 and 3.11. It is recommended that the Personal Computer (PC) have at least a 486/66 processor, 16MB RAM, 45 MB of free hard drive space, a bi-directional parallel interface and a CD-ROM drive.

INTERFACE

The interface between the 1175C and the PC is a high-speed IEEE 1284 bi-directional parallel interface. This allows a single-cable connection by which all printing, scanning, copying and FAXing is accomplished. It uses the parallel port on the PC with no additional hardware cards or interface cards required. The 1175C is designed to be a "plug-and-play" compatible device, which means the PC will find the right interface port and drivers and configure them to work correctly.

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Brother MFC-8600

The Multifunction Center MFC-8600 is produced by a Brother Industries, Ltd. subsidiary in China. It is a laser multifunctional machine which can perform six different functions; printing, faxing, copying, scanning, PC faxing and video capture. The MFC 8600 is developed from a laser printer, and the print assembly is used in the operation of four of the six functions, printing, faxing, copying and video capture.

The precursor to the MFC 8600 was a basic laser printer consisting of an imaging assembly and a laser writing output assembly in addition to various control panels and software necessary to carry out the printing function through the PC. The imaging assembly consists of a toner cartridge, drum unit, developer and fixing unit. The laser writing output assembly consists of a LED, focus lens and polygon mirror. In addition the laser printer includes a main board (CPU), power supply unit, user interface or control panel, printer driver (CD) and printer interface(s). The basic printer was first converted into a multifunction machine with the addition of the facsimile function. To accomplish this the main PCB of the printer was replaced with a larger board (CPU) that includes embedded printer software. A power supply with a higher output was provided. The user interface was replaced with a new panel for the fax function. In addition, the new unit was supplied with a fax modem board, phone handset, a Network Connection Unit (NCU) board for phone technology and a scan input assembly, consisting of a CIS unit (Contact Image Sensor) or CCD unit, an illuminating LED, self-focusing lens, photo-electric element and cover glass.

Since the output of a facsimile transmission is a copy of that transmission, the addition of the facsimile function inherently includes a copy function without the need for additional software or hardware. The addition of the copying function is created simply by adding a copy key to the user interface panel.

The MFC 8600 also includes a scanning function, which is created by the addition of Twain Software (CD). The PC fax function is also a software addition. The video capture function, which allows users to capture color video into the PC from a VCR, camcorder or digital camera and print any frame through the PC, is created by the addition of a video port and a PCB.

The MFC 8600 is capable of printing 12 pages per minute at a true resolution of 600 x 600 dpi. The MFC8600's facsimile features include a 30 page auto document feeder, a 14.4 bps high speed fax modem, storage of up to 270 pages for out-of-paper reception and dual access which allows the user to scan a fax into memory while another is being received.

As noted above, the MFC 8600 does not include any additional hardware or software components to create the copier function. The MFC 860 can copy up to 12 pages per minute at 600 dpi resolution. It is also capable of making up to 99 copies of a single original and can reduce or enlarge the original document from 50% to 200% in one percent increments.

The scanner can scan a document at up to 1200 x 1200 dpi (Interpolated) resolution or up to 300 x 600 dpi optical resolution.

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Brother MFC 1970mc

The multifunction Center MFC 1970mc is a six in one multifunctional center that is produced by a Brother Industries Ltd. Subsidiary in Malaysia. It uses thermal transfer technology and is capable of performing six functions; printing, faxing, copying, scanning, PC faxing and as a message center.

Thermal transfer technology is based upon the utilization of a thermal print head which functions as the imaging assembly of the machine. The MFC 1970mc uses a thermal ink ribbon, which, when heated by the thermal print head, transfers the ink from a polyethylene terephthalate ribbon onto plain paper in the image of the character or picture that is desired. These two components, together with a main board or control board and a power supply constitute the print mechanism of the device. In addition the machine includes the software and cable connection necessary to function with a PC. Thermal transfer technology has been used in a variety of printer applications long before the advent of multifunction machines, which only came to market in the early '90s. This technology is commonly found in labeling machines, bar code printers, and certain typewriters.

Because the printing in a thermal transfer MFC is created serially, or one horizontal line at a time, the print speed of a thermal transfer printer is slower than in a laser printer or laser MFC. A laser machine, in contrast, prepares the entire page for printing in a single operation. The MFC 1970mc prints at a speed of 2 pages per minute at a resolution of 200 x 400 dpi.

The facsimile feature of the MFC 1970mc uses a 14.4 bps high speed modem and has 1MB memory giving it the capability to store up to 50 pages. Since the output of a facsimile transmission is a copy of that transmission, the addition of the facsimile function inherently includes a copy function without the need for additional hardware or software. The addition of the copying function is created simply by adding a copy key to the user interface panel.

The copier feature can create up to 99 copies of an original document and can reduce or enlarge the original document from 50% to 150% in 7 set increments. The copier speed is the same as the print speed, or 2 pages per minute.

The MFC 1970mc also has a scanning feature which is incorporated into the machine with a software addition and can scan documents at a resolution of up to 400 x 400 dpi (Interpolated).

In addition the MFC 1970mc can send faxes to a PC, which is also accomplished by the inclusion of additional software. It also includes a 30-minute built in digital answering machine, speakerphone and related features.

There are no optical elements involved in the output of this machine. The only optical elements are found in the input optics, or scanning device. These optical elements consist of an illuminating LED, self focusing lens, photo-electric element and a cover glass.

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Océ 3133

The Océ 3133 is a Low Volume multi-functional digital machines with copier-, printing-, fax- and scan-to-file functionality. The machine is designed for a monthly volume of 7.000 - 15.000 copies/prints with an average load of approx. 12.000 prints/month.

The product is based on a digital black- and- white printer engine identical to the Océ 3121, but running at higher speed and provided with some different options.

The engine has scan-once-print-many functionality. This enables electronic sorting, no longer duplex storage in a duplex unit and overall improvement of efficiency. The machine is shipped with 32 MB standard, and can be expanded to 96 MB. The output on A4 is 600 x 600 dpi, output format is minimum A6, maximum A3. The Océ 3133 is provided with an electronic mailbox function. The mailbox enables you to store jobs on the copier hard disk, in order to print them from the operator panel at a later time. In total 100 mailboxes are provided. To make use of this functionality, additional memory of 64 MB has to be installed.

The basic machine is one solid, desktop module containing the copier process functions and is provided with an original flap, 2 paper trays and a copy-receiving tray. Optional available modules are:

2 ADF types:

1. Standard ADF (Automatic Document Feeder)
2. Simple ADF-E - limited number of original handling

4 different types of finishing

1. Finisher Stapler EI: simple one-bin finisher
2. Finisher Multi-Stapler C1
3. Finisher Multi-Stapler Booklet C2
4. Multi output tray

Paper tray -2 bin paper tray /console

Large paper tray - one bulk tray for max. 3.500 sheet

Optional functionality, which is physically located inside the copier module, consists of :

fax board

printer & network board

mailbox functionality

Token Ring connector

SCSI board for direct PC-scan-to-file via parallel cable

additional memory for fax and/or printing

battery board for fax-and print memory storage

Operation takes place with help of a large LCD touch screen. This means no language dependent display overlays are needed, only the operating language will do.

The machine is designed in such a way that the customer can replace toner cartridges. This implies extra service visits for replacing drums only.

The multi-functionality consists of copying, printing, faxing and basic scan to file.

A. Digital copier

This machine is equipped with a standard set memory of 32 MB, which gives great advantages:

each original is only scanned once, resulting in less original jams and original contamination & damage by definition.

electronic set processing makes a duplex station superfluous, resulting in less paper jams and improved efficiency.

Digital copying is a two stage process: first scanning and then printing. Scanning takes place with help of a fluorescent lamp and a CCD unit. From the image processing is printed by means of laser beam exposure on an OPC. The fusing is achieved by means of a classical heating roller; the warm up time has become 84 seconds.

The benefits for digital processing of originals in general are:

Image processing

During the process of scanning and printing the image quality is checked and improved when needed. Once the original is digital available, image manipulation allows enhanced applications. This means far more can be achieved with originals than on analogue machines, like:

- improving difficult originals, like pale background or faded text
- better generation copies because of less quality drop per stage
- large zoom area of 25% to 80%
- image creation features :
 - *negative-positive, black and white in reverse
 - *image repeat 2 to 20 times
 - *mirror mode, single or both original and mirror image on copy
 - *slanted image, to an angle between -45 to +45°
 - *area designation features :
 - framing, only copy inside designated area
 - blanking, only copy outside the designated area
 - negative-positive, inverted inside the designated area
 - superimposing 2 images on a single copy
 - automatic booklet functionality A4 and A5

Digital copy quality

Scanning and processing also implies a raster image for pictures, photos and graphs. Half tones and thin lines are therefore printed in a superior quality compared to an analogue process.

B. Network connection

The Océ 3133 is capable of printing high quality prints at resolutions of 300 or 600 dpi even up to 600 x 1200 dpi with resolution enhancement.

The Océ 3133 controller can be easily integrated in office environments, especially with the support of the LAN manager printing service. In addition to that the controller supports all popular network protocols and connectivity, which are to be found in office environments. The Océ 3133 is capable of printing PostScript 3 and PCL 5e print jobs. For Windows and Macintosh environments PostScript and PCL drivers are available.

The controller can drive An addition to the more general engine functions like sorting and stapling- the FAX function of the Océ 3133, which offers the functionality of sending faxes (individual or group wise) right from the user's desktop PC by using an address book, which resides on the user's PC. Also end user utilities (Web Utilities) for job management and machine status information are available.

C. Facsimile functionality

The (optional) fax board turns the Océ 3133 into a heavy duty Super G-3 fax with a lot of features and a high quality. Not only original - single as well as double-sided- documents can be scanned into the fax memory at a max. rate of 33 pages per minute, with help of the network connection users can send faxes from their PC desk directly. This means no loss of time to visit the physical fax machine, no loss of quality, no risk for skewing or paper jams etc.

4. Scan-to-file functionality

In combination with different applications the scan to file function enables adding pictures to reports, electronic archiving, electronic distribution of documents (E-mail, fax) etc.

* * *

NOTE FROM THE DANISH ADMINISTRATION

With reference to the questions put forward in your letter of 9 June 2000, the Directorate of Customs and Excise is pleased to express the following preliminary view :

The classification of the products in question might be decided on the basis of different criteria. Those might be, of course, which functions they are able to execute, but also other criteria like the capacity (printed pages per minute, etc.) and the design.

HP 320 Mopier

By design, the scanner part of the machine seems to be attached as an optional function. This may lead us to the conclusion that this is a printer for an ADP machine, as the scanning function is vital to a copier. However, the producer describes it as "a network copier that is not only network capable but network ready". This indicates that it can work a "stand-alone" regarding the copy function, and thus the importance of the latter function is equal to that of a printer. Our conclusion is that the HP 320 Mopier, in accordance with General Interpretative Rule (GIR) 3, should be classified in heading 90.09.

Océ 3133, Xerox Document Centre 340 and Xerox Document Centre 230 DC

Almost with the same argumentation, we would support the classification of Océ 3133, Xerox Document Centre 340 and Xerox Document Centre 230 DC under heading 90.09.

Brother MFC-8600 and Brother MFC-1970

The printing and copying capacity of the Brother MFC-8600 and Brother MFC-1970 is poor compared to the above-mentioned machines. Also by design, especially for the MFC-1970MC, the machines might be best described as fax machines with additional functions. We would therefore support classification of these machines in heading 85.17.

HP OfficeJet 1175c

We believe that the Hewlett-Packard OfficeJet 1175c is originally constructed as a printer, scanner and copier (no facsimile function) under the name HP OfficeJet 1170C. The faxing function is found on the HP OfficeJet 1170C, but we do not feel that this changes the machine into a facsimile machine. As both the copying and printing capacity is quite low, we would support classification of this machine under heading 84.71 as a scanner.

* * *

NOTE FROM THE IRANIAN ADMINISTRATION

In spite of not having received yet the catalogue or brochure or manual which is of high importance for determining the classification of machines such as these multifunctional digital copiers, the I.R. of Iran Customs Administration is of the opinion that the goods in question are classifiable in heading 84.71.

* * *

NOTE FROM THE CZECH ADMINISTRATION

All the multifunctional digital copiers at issue are machines, which are intended to perform complementary functions. Our Customs Administration is of the opinion that, for classification purposes, it is necessary to determine the principal function of the machines.

All of these machines, except the HP 320 Mopier, which does not have the facsimile function, perform the following functions :

- input unit of an ADP machine (scanner) – heading 84.71 (subheading 8471.60)
- output unit of an ADP machine (electrical apparatus for line telephony or line telegraphy (facsimile machines and also telephone sets) - heading 85.17 (subheadings 8517.19 and 8517.21), and
- photocopying apparatus or thermo-copying apparatus – heading 90.09 (subheadings 9009.12 and 9009.30).

We think that, for the classification of these machines, Note 3 to Section XVI and General Interpretative Rule (GIR) 3 should be applied. Note 3 to Section XVI is applicable to only those functions which are covered by headings within Section XVI (input or output units of ADP machines and electrical apparatus for line telephony and telegraphy). These machines, however, also include functions which are covered under Chapter 90 (photocopying or thermo-copying apparatus). Therefore, it is necessary to identify which function provides the principal function, i.e., whether it is a function covered under Chapter 90 or one of the functions covered under Section XVI, bearing in mind that GIR 3 (namely Rule 3 (b) or 3 (c)) and/or Note 3 to Section XVI.

We believe that in order to identify which function is the principal function it is necessary not only to review the functions performed by the machines but also to review the design functions of the machines and their application.

According to the above-mentioned criteria, we believe that the machines listed in Doc. NC0211E1 should be classified as follows :

1. Hewlett Packard 320 Mopier

According to our opinion, this machine has two main functions, i.e., (1) output and input units of an ADP machine of heading 84.71 (subheading 8471.60) and (2) photocopying apparatus of heading 90.09 (subheading 9009.12). We suppose that one of the main technical parameters of this machine is the speed of the paper output (32-PPM), i.e., speed of the print or copy. In our view, each of these functions merit equal consideration and, as a result, neither of these functions imparts to the machine its principal function.

This machine should therefore be classified under heading 90.09 (subheading 9009.12) by application of GIR 3 (c) because, according to the design and technical parameters of this machine, it is impossible to state whether the principal belongs to function (1) or (2). Note 5 (E) to Chapter 84 was also taken into consideration in reaching this classification decision.

2. Océ 3133, Xerox Document Centre 340 ST and Xerox Document Centre 320

These machines have three main functions, i.e., (1) output and input units of an ADP machine of heading 84.71 (subheading 8471.60), (2) facsimile machines of heading 85.17 (subheading 8517.21) and (3) photocopying apparatus of heading 90.09 (subheading 9009.12). In our view, the speed of the paper out (33, 40 and 30 PPM) is one of the main technical parameters. Also, according to the technical and design parameters, it is our opinion that the facsimile function supports function (1) and, as a result, would not impart to the machine its principal function. While function (1) predominates over function (2), it does not over function (3). Therefore both functions (1) and (3) merit equal consideration.

These machines should therefore be classified under heading 90.09 (subheading 9009.12) by application of GIRs 1 and 3 (c). These machines include three main functions, two of which are covered by Section XVI and the third, which is covered by Chapter 90. Note 3 to Section XVI directs the classification of machines containing two or more functions by determining that function which performs the principal function. As previously stated, function (1) predominates over function (2). It is then necessary to determine whether function (1) predominates over function (3) or vice versa. Taking into account the design, application and technical parameters, we believe that it is not possible to determine the principal function. Consequently, GIR 3 (c) must be applied. Note 5 (E) to Chapter 84 was also taken into consideration in reaching this classification decision.

3. Brother MFC 8600 and Brother MFC 1970 MC

These machines also have three main functions, i.e., (1) output and input units of an ADP machine of heading 84.71 (subheading 8471.60), (2) telephone sets of and facsimile machines of heading 85.17 (subheadings 8517.19 and 8517.21) and (3) photocopying apparatus of heading 90.09 (subheading 9009.12 and 9090.30). In our view, the speed of the paper out is one of the main technical parameters. It should be noted that the speed of the printing out is slower than for the previously mentioned machines (i.e., 2 or 12 PPM). Consequently, we believe that function (3) does not provide the principal function for these machines. Therefore, it is necessary to refer to Note 3 to Section XVI and to determine the principal function between functions (1) and (2).

These machines should be classified under heading 85.17 (8517.21), as facsimile machines, by application of GIRs 1 and 3 (b), Note 3 to Section XVI and Note 5 E) to Chapter 84. We re-iterate that function (3), in this case, can not impart to the machine its principal function because of the design, application and technical parameters. Consequently, it is impossible to classify these machines under heading 90.09.

4. Hewlett Packard OfficeJet 1175c (all-in-one)

This machine has three main functions, i.e., (1) output and input units of an ADP machine of heading 84.71 (subheading 8471.60), (2) facsimile machines of heading 85.17 (subheadings 8517.21) and (3) photocopying apparatus of heading 90.09 (subheading 9009.12). In our view, each of these functions merit equal consideration and, as a result, none of these functions imparts to the machine its principal function.

This machine should be classified under heading 90.09 by application of GIR 3 (c) because, according to design, application and technical parameters of this machine, it is

impossible to determine whether function (1) or (2) imparts the principal function. Note 5 (E) to Chapter 84 was also taken into consideration in reaching this classification decision.

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NOTE FROM THE MEXICAN ADMINISTRATION

1. The Harmonized System Committee set forth that the said machines could be classified in any of the following headings :
 - 84.71 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 and machines not elsewhere specified or included (+).
 - 84.72 Other office machines (for example, hectograph or stencil duplicating machines, addressing machines, automatic banknote dispensers, coin-sorting machines, coin-counting or wrapping machines, pencil-sharpening machines, perforating or stapling machines).
 - 85.17 Electrical apparatus for line telephony or line telegraphy, including line telephone sets with cordless handsets and telecommunication apparatus for carrier-current line systems or for digital line systems; videophones.
 - 90.09 Photo-copying apparatus incorporating an optical system or of the contact type and thermo-copying apparatus.

From the above, it is deduced that the Committee is contemplating the different functions that these machines perform, i.e., Heading 84.71 considers the entry and exit under subheading 8471.60, which could be the scanner and the printer, respectively. Heading 85.17 contemplates the telefax under subheading 8517.20. In the case of heading 90.09, it contemplates photocopying by an optical system under subheading 9009.21. Referring to the information provided, it is noted that digital equipment usually bases its functioning on an optical system.

2. According to the information consulted (see annexes), the multifunction digital photocopying, specifically models **Brother MFC 8600, HP Office 1175c (all in one), and Brother MFC 1970**, have to be necessarily and permanently connected to the central processing unit (CPU), of an automatic data processing machine (computer), so that the exit units (printer and fax) and entry (scanner and fax) perform the function for which they were designed.

Before these types of machines can be interconnected to a computer, the SOFTWARE controllers must be installed. These controllers permit the computer to communicate properly with the machines mentioned under Item 2, for printing operations, sending and reception of faxes, and scanning. In general, they incorporate the option to send and receive, via fax, computer files, such as a document of a text processor or an image file directly from your computer using the modem for fax incorporated therein.

All software for the controllers must be installed from the CD, which usually accompanies this equipment.

3. Based on the information provided so far, the data compiled via the internet (see annexes) and in General Interpretative Rules 1 and 3 (b), we take the liberty to express the opinion that the digital photocopying model Brother MFC 8600, HP Office 1175c (all in one) and the Brother MFC 1970, may be considered as machines which have a combination of entry units (scanner, fax) and exit units (printer, fax), which gives them an essential nature and that is to EXCHANGE with an automatic machines for data

processing (computers), while the function of photocopying is a secondary function. Therefore, we suggest the application of heading 84.71 provided the equipment meets all the remarks mentioned under Item 2.

4. As to the multifunction digital photocopying **HP 320 Mopier, Océ 3133, and Xerox Document Centre 340 ST**, we hereby make the following inquiries of a technical nature :
 - (a) Is it necessary or is it a requirement for connection to the central processing unit of an automatic data processing unit (computer) in order for all the options to function properly?
 - (b) Are they sold with any kind of software containing information for printing, sending/receiving faxes, scanning, that will, inevitably, be installed with an automatic data processing machine?
 - (c) Do they have any type of memory unit which allows them to store, in a file, images resulting from the scanning process?
 - (d) In the event that these machines are not connected to a computer, is it possible to print text files, calculation sheets, images, etc., that are produced with commercial software?
 - (e) With respect to equipment which have a fax modem, is it possible to send and receive faxes by using this equipment, aside from being connected to a computer (i.e., standalone)?
5. Although this equipment may be connected to an automatic data processing machine, the latter cannot be of just any type. It should be designed to “work in the red”; that is, it must be a server which is able to meet the demands of multiple users at the same time. We ought not to say that from the information released from the internet, we assume that a prevailing or essential character is given to the capacity they have to handle documents (printing and copying), even though they can also perform the function of fax and scanner.
6. The main differences observed between the equipment mentioned under items 2 and 4 are as follows :
 - (a) While those mentioned under item 2 are designed to be used by a reduced group and even individually, those under item 4 are designed to work in a group or multi-user environment.
 - (b) The volume of information they can process is from 8-12 pages per minute and from 32-40 pages per minute, respectively.
 - (c) Cost : the first ones have an approximate cost of US\$100. The Document Centre 340 ST has a value of US\$18,695, in its initial configuration.
 - (d) Some of the machines cited under item 4, i.e., the HP Mopier 320, have a hard disk integrated into the machine and it is scalable, while those mentioned under item 2 do not have a hard disk and are also not scalable.
7. In view of the foregoing, it is assumed that in order to classify the machines cited under item 4, we should only consider headings 84.71 and 90.09.

In our view, by applying General Interpretative Rules 2 and 3 (b), as well as referring to the General Explanatory Notes, the applicable heading is 84.71.

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NOTE FROM THE POLISH ADMINISTRATION

Concerning the classification of multifunctional digital copiers, the Central Board of Customs thinks that it would be difficult to classify the apparatus presented in the attachment to the Secretariat's letter dated 9 June 2000 on the basis of the data presented. This is due to the fact that none of the apparatus presented specified the predominant function.

Please find enclosed one example of multifunctional apparatus, the Xerox WorkCentre 480cx, wherein the predominate function is "printing" and, which, for that reason, is classified by Poland in heading 84.71.

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NOTE FROM THE PERUVIAN ADMINISTRATION

The **HP 320 Mopier** multifunctional digital copier is liable to be classified in heading 90.09 as a photocopy machine using an optical system, or in heading 84.71, as a machine for the treatment or processing of data, if it complies with the conditions described in Note 5(B) to Chapter 84. Nevertheless, since it is a machine that performs multiple functions (printing, copying and scanning), by application of General Interpretative Rule 3 (b), it should be classified in heading 90.09, as its essential character is determined by the photocopying function.

Océ 3133, Xerox Document Centre 340 ST, Xerox Document Centre 230, Brother MFC 8600, HP Office Jet 1175c (all in one) and Brother MFC 1970 MC are all multifunctional digital copiers having printing, copying, scanning and faxing functions. They are liable to be considered in heading 90.09 as a photocopy machine using an optical system, in heading 84.71, as units of machines for the treatment or processing of data, if it complies with the conditions described in Note 5(B) to Chapter 84, or in heading 85.17 as sets of telecommunication by energy carrier (telephone lines). Nevertheless, since they are machines that perform multiple functions, by application of General Interpretative Rule 3 (b), they should be classified in heading 85.17, as its essential character and importance is determined by the telecommunication (fax) function and by telephony line function.

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NOTE FROM THE SWISS ADMINISTRATION

Classification of multifunctional copiers

In your letter of 9 June 2000 you requested the Swiss Administration to forward its views on the classification of multifunctional digital copiers.

It transpired from various working documents that the apparatus at issue may potentially fall in the following headings, depending on the **characteristics** and **legal provisions** considered decisive for governing the classification: headings 84.71, 84.72, 85.17 and 90.09.

Switzerland agrees with the Secretariat (paragraph 5 of Doc. 42.498) that Note 3 to Section XVI cannot be used to justify the tariff classification, given that the apparatus perform the functions listed in Chapters 84, 85 and 90. Hence, classification must be made by application of GIR 3 (b) or even GIR 3 (c).

On the basis of the information obtained on the Internet and from the working documents, and subject to a more detailed study of the technical documentation on the apparatus in question, Switzerland feels that they are classifiable as follows:

- HP 320 MOPIER, OCE 3133, Xerox Document Centre 340 ST :
Classification in heading 90.09

Justification: Multifunctional apparatus, designed in particular for printing and photocopying. Photocopying is considered the principal function of the apparatus. GIRs 1 and 6, Note 5 (E) to Chapter 84 and GIR 3 (b) apply.

- Brother MFC 8600 and MFC 1970 MC: Classification in subheading 8517.21

Justification: Multifunctional apparatus, designed in particular for printing, photocopying, faxing and scanning. The fax function is considered the principal function of the apparatus. GIRs 1 and 6, Note 5 (E) to Chapter 84 and GIR 3 (b) apply. GIR 3 (c) also applies for the MFC 8600 apparatus, given that the printing and faxing functions are of equal importance.

- Hewlett Packard OfficeJet 1175c: Classification in heading 90.09

Justification: Multifunctional apparatus, designed in particular for printing, copying, faxing and scanning. The apparatus performs several functions, none of which can be considered as giving the apparatus its essential character. Note 5(E) to Chapter 84 and GIRs 1, 3 (b) and 3 (c) apply.

