

WORLD TRADE ORGANIZATION

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**Committee of Participants on the Expansion of Trade in
Information Technology Products**

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CLASSIFICATION OF INFORMATION TECHNOLOGY PRODUCTS

Communication from the World Customs Organization (WCO)

Revision

This following communication, dated 25 July 2000, has been received from the World Customs Organization (WCO).

Please find attached a document updating the document that the WCO sent to the WTO on 10 March 1998 (G/IT/5) outlining the WCO's actions already taken with regard to ITA products.

WCO's action relating to the HS classification of specific products
relating to the WTO/ITA

ITA	WCO's action
Attachment A, Section 1	The Harmonized System Committee (HSC) on an on-going basis considers the amendment of the HS Explanatory Notes so as to insert references to specific products cited in Section 1 with a view to ensuring their uniform classification in the HS.
Attachment A, Section 2	The classification of equipment for the manufacture of semiconductor devices and flat panel devices (FPDs) and the classification of FPDs will be examined during the next HS review cycle (HS/2007).
Attachment B	
(N° 2) Electric amplifiers	
(N° 3) Flat panel displays	The classification of repeaters used in LAN systems will be discussed at the HSC's 26 th Session in November 2000.
(N° 4) Network equipment	See the explanation for Attachment A, Section 2.
(N° 8) Plotters	The HSC has classified certain LAN equipment, in particular, communications controllers or routers, cluster controllers, multistation access units (LAN hubs) and optical converters in heading 84.71 (subheading 8471.80) (HSC/25).
	The HSC decided to classify the FIRE 1000 and FIRE 9000 (imagesetters) in heading 90.06 (HSC/20). At the 24 th Session, the HSC decided to classify the FIRE 1000 in subheading 9006.10 and the FIRE 9000 in subheading 9006.59.
	The HSC was asked to examine, at its 22 nd session, the classification of a scanner, the Smart 342. It was decided that the apparatus should be classified in subheading 8471.90, given the fact that this scanner was a type of "optical reader" and its function was similar to that of a bar code reader. At the same session, the Committee unanimously agreed to classify a developer, the Rapline 51 OLP, in subheading

ITA	WCO's action
<p>(N° 9) Printed circuit assemblies</p> <p>(N° 10) Projection type flat panel display units</p> <p>(N° 11) Proprietary format storage devices</p> <p>(N° 12) Multimedia upgrade kits</p>	<p>9010.50. The HSC was also asked to classify other imagesetters : the SelectSetAvantra 30, Dolev 4 Press and Accuset 1500 Plus and decided (HSC/24) to classify them in subheading 9006.10. A digital ink-jet printer (Iris 3047) was classified in subheading 8443.51.</p> <p>(See the explanation for N° 12).</p> <p>The HSC examined the classification of computer data and video projectors (I) P170v VPH-1292Q/QM and (II) Online Oration Plus 846 (for both computer and video signals) and decided to classify (I) in subheading 8528.30 and (II) in subheading 8528.21.</p> <p>The HSC at its 25th Session agreed unanimously on the classification of proprietary storage formats in subheading 8471.70.</p> <p>The classification of a multimedia upgrade kit consisting of a video card, sound card and software therefor was postponed to the next HSC session (HSC/26).</p>

- (Note) 1. Items N° 1, N° 5, N° 6, N° 7 and N° 13 were decided by the Committee as notified previously (see WTO document G/IT/5 (March 16 1998).
2. HSC/21 was held in March 1998
HSC/22 was held in November 1998
HSC/23 was held in May 1999
HSC/24 was held in October 1999
HSC/25 was held in March 2000
HSC/26 will be held in November 2000

For further information, in the annex to this document there is a list of all products that the Harmonized System Committee has classified since its 22nd Session, concerning Chapters 84, 85 and 90.

Annex

Product description	Classification	Classification rationale
<p>Closed circuit video surveillance system, consisting of a combination of a variable number of television cameras and colour video monitors connected by coaxial cables to a controller, switchers and audio board/receivers. The circuit thus created is controlled from one or more monitoring posts. In some cases, personal computers (for saving data) and/or video recorders (for recording pictures) may also be linked to the system. Other accessories, e.g. microphones, loudspeakers, audible alarms, etc., may also be added.</p> <p>The system consists of television cameras, colour video monitors, personal computers, video recorders, microphones, loudspeakers and coaxial cables.</p>	<p>Separate classification of the components in their own heading.</p>	
<p>System comprising several types of apparatus, connected to each other by cables, designed to enable the teacher to control the work of several students using an interactive communication system. The apparatus consists of (1) a teacher workstation (personal computer (PC), tower for connection with integrated loudspeaker, command unit with classroom layout and dialogue system, headset, and one to three cassette recorders) and (2) a student workstation (cassette recorder, headset with microphone and remote control). The system also includes the appropriate software, recorded on WINDOWS 95 or NT 4.0-type diskettes.</p> <p>The system can be used with a typewriter, computer, dictating machine, video, or used solely as a language laboratory.</p>	<p>Separate classification of the components in their own heading.</p>	
<p>Horizontal freezer with a curved lid that can be raised; the freezer is designed for preserving and displaying foodstuffs; it can be placed at any point of sale, either against a wall or in long back-to-back islands. It has a storage capacity of 365 l or 550 l depending on the model; a built-in refrigerating system makes it possible to maintain a temperature of between -20 °C and -24 °C at an ambient temperature of 30 °C.</p>	<p>8418.30</p>	
<p>An apparatus for filtering blood, consisting essentially of a filtration mesh of polyester in a transparent housing. Micro-aggregates consisting of leukocytes, platelets, cell fragments and proteins, in sizes ranging from 30 to 200µm, are removed from stored blood.</p>	<p>8421.29</p>	
<p>Marine loading arm designed to safely transfer dangerous liquids in loading or unloading operations, especially at ports and industrial plants, using a piping system with articulated joints fitted with automatic safety valves. The piping is manipulated during liquid transfer by a self-contained cable and pulley system linked to a support and counterweight structure. The system does not include any pumps.</p>	<p>8428.90</p>	<p>GIR 1 and GIR 6</p>

Product description	Classification	Classification rationale
<p>Digital ink-jet printer which reproduces continuous-tone colour images (formats up to A0 – 864 x 1,189 mm), using variable-sized dots, on a wide range of media : newsprint, mat, semi-mat or glossy papers, transparent or translucent medium, watercolour paper, coated fabric, etc. This apparatus, weighing 272 kg and measuring 1070 x 1520 x 760 mm (H x W x D) is 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 printing is effected on the basis of data provided by an external automatic data processing machine, to which the apparatus can be connected by a parallel interface.</p>	8443.51	GIR 1 (Notes 5 (B), 5 (D) and 5 (E) to Chapter 84) and GIR 6.
<p>Graphic tablets / digitizers, being serial input devices for personal computers and workstations. The tablets provide high performance digitizing for personal computer and computer aided design (CAD) applications, presentation graphics and similar 2-D computer graphics applications. The tablets are high productivity tools that include the capabilities of a digitizer. In the digitizer and/or tablet role, they convert graphics to accurate digital information for computer storage and processing. All standard mouse functions are available as well. The flush surface design provides smooth cursor and/or pen control across the entire working surface. The digitizing surface has a lift-up translucent film for protecting delicate documents being traced. The overall dimensions of the tablets range from 151 mm x 151 mm to 305 mm x 457 mm. Weight 2 – 3.6 kg.</p>	8471.60	
<p>Data storage devices, whether for internal installation in an automatic data processing (ADP) machine or for external use with such machines, in which case they are portable and connectable to the machine through the parallel port, or through an SCSI or USB connection. The devices may be in the form of drives for discs (magnetic discs or CD-R (CD-Recordable) or CD-RW (CD-Rewritable) discs) or for magnetic tape. The discs and tapes have storage capacities ranging from 40 MB to 2 GB, and have a specific form which can only be used with the appliances of the same producer.</p> <p>Packages for retail sale may contain the driver and a power supply, a connecting cable, software and, sometimes, a disc. The drives are configured to work in an ADP environment operating system (such as Windows 95, Windows 98, Windows NT, MAC).</p> <p>Discs, tapes and other media presented with the unit are classified separately.</p>	8471.70	GIR 1

Product description	Classification	Classification rationale
<p>Digital Linear Tape (DLT) Autoloaders and Libraries. Autoloaders are comprised of a robotic mechanism, a control mechanism, a drive mechanism and 8 tape cartridge slots. Libraries are comprised of a robotic mechanism, a control mechanism, 1 to 6 drive mechanisms and 20 to 60 tape cartridge slots. They are used for data backup applications where unattended, automatic operation is required and high data throughput is needed.</p> <p>The robotic mechanism consists of a robotic "hand", called a picker, capable of holding one piece of (DLT) medium and the translation mechanism to move this medium to/from any of 1 to 6 drives or any of the storage locations (cartridge slots). This mechanism is controlled by a microprocessor driven controller, which includes servo systems, robotic control systems, error recovery/diagnostic systems, and interface systems. The computer server to which this device is attached communicates and transfers data via an SCSI or a fibber channel interface. The robotic controller shares the SCSI bus with one drive while each of the other drives has its own SCSI bus, for bandwidth considerations. Computer system management of the library is accomplished via a separate LAN interface.</p> <p>The drive mechanism utilised in the DLT Library uses a half-inch tape cartridge medium. The drive writes multiple channels in parallel with multiple serpentine passes down and back on the tape being required to write the entire tape. The capacity is 40 gigabytes per tape cartridge. The drives have hardware data compression available which will double the capacity, nominally. The data transfer rate is as high as 10 megabytes per second per drive.</p>	8471.70	GIR 1
<p>5.25" Magneto-Optical Jukeboxes, comprised of a robotic mechanism, a control mechanism, 1 to 10 drive mechanisms and 1 to 238 disk cartridge slots. They are used for business applications requiring fast data access by multiple users simultaneously. The robotic mechanism consists of a robotic arm capable of holding one or two pieces of 5.25" media and the translation mechanism to move this media to/from any of 1 to 10 drives or any of 1 to 238 storage locations (cartridge slots), as well as to an import/export location called a mailslot. This mechanism is controlled by a microprocessor driven controller, which includes servo systems, robotic control systems, error recovery/diagnostic systems, and interface systems. The computer server to which this device is attached communicates to it via an SCSI interface, with the robotic controller responding as one SCSI ID on the bus.</p> <p>The magneto-optical drive mechanism utilised in these jukeboxes uses a combination of an electromagnetic field and a red laser to change magnetic domains on a 5.25" disk to create data patterns. The data transfer rate is as high as 4.5 megabytes per second.</p>	8471.70	GIR 1

Product description	Classification	Classification rationale
Communications controllers or routers (including "LAN bridges"), consisting of a main processor, an internal memory and multiple input/output ports; they route synchronous-network-architecture (SNA) specific data traffic.	8471.80	
Synchronous-network-architecture (SNA) cluster controllers (including remote control units), being apparatus acting as a terminal concentrator for co-axial connected terminals needing to connect to a SNA network using SNA network protocols.	8471.80	
Multistation access unit (a passive LAN hub), used to provide wiring concentration for up to eight token-ring LAN workstations so that the physical star-wired configuration is used to form an electrical ring. Multistation access units can be connected together to increase the number of workstations that can attach to any one token ring, to a maximum of 260 devices.	8471.80	
Optical fibre converter, converting the limited-distanced token-ring LAN digital signal into a long-distance digital signal over fibre-optic cable.	8471.80	
A flatbed table-top scanner used in the graphic industry, particularly for scanning colour films. It consists of several thousand CCD elements (arranged in a row, on a single integrated circuit and called a CCD array), a glass plate, lenses, a lamp, a mirror and electrical connections. Light of a specific colour and intensity falling on each CCD element creates a proportional electrical charge within it. This analogue charge is systematically passed along chains of cells to an A/D converter, where it is converted into digital data. The original to be scanned is placed on the glass plate where it is evenly lit by a light source. The entire width of an image is read simultaneously as a line. The maximum scanning resolution is 8,200 dots per inch (dpi). The machine enables the retouching of images and prints, including Hue Saturation Luminance (HSL) colour corrections. It has to be connected directly (SCSI interface) to an automatic data processing machine.	8471.90	Optical reader, the function of which is similar to that of a bar code reader.

Product description	Classification	Classification rationale
<p>Pentium ® II processor in a rectangular Single Edge Contact (S.E.C.) cartridge (comprised of plastic and metal), the dimensions of which are 14 cm in length, 6 cm in width and 1.5 cm in thickness. Within the cartridge there is a single glass substrate (6-layer printed circuit board), onto which sub-components are surface mounted. These sub-components include three integrated circuits; namely, the core processor integrated circuit chip, four L2 (level 2) cache memory and a L2 cache controller (Tag RAM). In addition, there are passive components (resistor packs/capacitors). The core processor chip is the arithmetical and logical element; the L2 cache memory is a small, ultra-fast block of temporary memory; and the Tag RAM is the cache controller or logic chip. The Tag RAM accesses the L2 cache and finds where the necessary information is stored. The cartridge connects to an automatic data processing unit (a motherboard) via a single edge connector. These sub-components are surface mounted on this single substrate and are fully enclosed in a plastic and metal cartridge. The interconnections on the substrate have been obtained by printing and etching copper foil.</p>	8473.30	
<p>Wet and dry vacuum cleaner with self-contained electric motor, mounted on castors and designed for industrial and commercial use (hotels, restaurants, shops, companies, industrial premises, workshops, etc.) with the following technical characteristics :</p> <ul style="list-style-type: none"> - maximum engine power : 1,500 W; - electrical connection : 230 V - 50 Hz; - air flow : 3,600 l/min; - vacuum pressure : 23,000 Pa; - tank capacity : 38-50 l; - weight : 11-12 kg; - size : 445 x 450 x 505 mm. <p>The appliance is presented with certain standard accessories but may be fitted with other (optional) accessories; it is designed to suck up dry matter (dust, but also larger materials such as paper waste, wood chips, leaves, waste of glass or other minerals, mud, plastic waste, etc.) and liquids.</p>	8479.89	
<p>A tire inflation valve comprising a rubber stem, a screw-on cap and a brass insert consisting of an opening, a pin and a spring-loaded plunger mechanism, the whole of which is inserted into a wheel on which a tire is mounted. When the pin head is manually depressed, the valve opens, thereby allowing the flow of air into or out of the tire, depending upon the pressure differential.</p>	8481.80	

Product description	Classification	Classification rationale
<p>Frequency converter (Standard version) consisting of :</p> <p>(i) a circuit to rectify alternating current (AC) into direct current (DC);</p> <p>(ii) an intermediate voltage circuit (DC) which filters and smoothes the DC voltage from the rectifier and introduces direct current at constant voltage; and</p> <p>(iii) an inverter which generates a variable frequency alternating current.</p> <p>The apparatus is connected to an asynchronous motor whose speed of rotation will depend on the controlled value of the frequency that it emits, and produces a balanced three-phase alternating current from the constant-voltage DC coming from the intermediate circuit. In this device, the frequency of the main current can be modified, enabling the motor' s speed of rotation to be varied.</p>	8504.40	GIR 1
<p>An electrical apparatus designed to be used in a motor vehicle to warn the driver that a speed detection device, a "radar gun" or a "laser gun", is operating in the vicinity. It detects microwaves, ranging from 10.49 to 36 GHz, emitted by radar or laser guns operating on X, K, and selected Ka-SuperWideband frequencies. When these frequencies are detected, the apparatus emits distinct visual and audio signals (illumination of the laser alert LED coupled with a special audio tone). It is presented as a set comprised of the radar/laser detector, windshield clip, straight power cord, fuses and spare parts, printed material and an operating guide.</p>	8512.30	GIRs 1 and 6, classification at the subheading level being based on the essential character of the product, i.e., sound signalling equipment.
<p>A commercial microwave oven which meets or exceeds all safety performance and sanitation standards set for commercial food service microwave ovens. It weighs approximately 27 kg, has a power of 1,700 watts and its internal dimensions are 32.5 x 30 x 16 cm. This oven is designed to heat or cook food using dry heat or steam.</p>	8514.20	
<p>"MVX" voice processing system, consisting of a central processing unit (DOS operated) with hard disk and a floppy disk drive, a key board, a monitor (CRT), built-in call detection board(s), software and modem, and dedicated to enhance the handling of calls from a PBX (private branch exchange).</p>	8517.30	GIR 1
<p>"Children's Bible (look, listen, read)", comprising two books and a case containing two cassettes. The books (Volume 1 : Old Testament, Volume 2 : New Testament) contain passages from the Bible in continuous story form using illustrated texts, whereas the cassettes tell the same stories as those in the books and play music to indicate to the child when each page ends. The three components (two books and a folder containing audio cassettes) described are housed in a box for retail sale.</p>	<p>Books : 49.01</p> <p>Cassettes : 85.24</p>	GIR 1 (Note 6 to Chapter 85)

Product description	Classification	Classification rationale
Discs for laser reading systems, containing the software program called "Windows '98", but also containing sound and images.	8524.39	
Discs for laser reading systems, containing an encyclopaedia called "Encarta '99", but also containing sound and images.	8524.39	
Discs for laser reading systems, containing an entertainment game called "Fly Simulator", but also containing sound and images.	8524.39	
<p>A composite machine (cf. Notes 3 and 5 to Section XVI) consisting of the following elements in the same housing :</p> <ul style="list-style-type: none"> - FM/AM radio receiver; - Fluorescent lights; - Search light; - Red signal light; - Amber blinker; - Sonic alarm; - Integrated circuit which makes voice sounds as "stop using, please recharge" in order to remind the user to recharge battery when the battery needs recharging; - Built-in rechargeable battery with AC220V and DC12V charger. <p>The apparatus has a handle and a shoulder strap for use when carried in the hand or on the person.</p>	8527.19	Note 3 to Section XVI
Display for reproducing computer or video images on a large screen by placing it on an overhead projector and connecting it to a computer or a video source. The resolution is 640 x 480 pixels, and it also incorporates functions for pointing, etc., on the projected image.	8528.21	GIR 3 (c)
A full-colour desktop LCD (liquid crystal display) projector (LCD: a matrix of 921,600 pixels arranged in 480 rows and 640 columns). This type can be connected to a computer, the output of VCRs or a Laser Disc player. It has built-in amplifier/speakers which enable users to connect to a wireless microphone, portable CD player or to the auxiliary output of a stereo system.	8528.30	GIR 3 (c)
A graphics projector to reproduce images of both computer and video signals with super high resolution 9-inch cathode ray tube and advanced optical/electrical technologies (2,000 x 1,600 dot resolution for the highest frequency computer graphic images).	8528.30	GIR 3 (c)

Product description	Classification	Classification rationale
<p>Modulable configuration apparatus for connecting electrical telecommunication cables, the basic element of which is a circuit card (dimensions 80 mm x 110 mm x 7 mm). The card in question consists of a printed circuit with a plastic housing. A resistor and five terminals are mounted on seven printed connecting elements which place the circuit card in contact with the collection housing. The side of the structure also contains four soldered sockets connected electrically to the printed circuit. While a light emitting diode (LED) is contained in one socket, the other three sockets are jack connections. These last three are respectively marked M (Monitor), O (Output) and I (Input). The socket marked M and the resistor permits the LED to indicate if there is a connection to another circuit card.</p>	8536.90	
<p>Imagesetters working with a visible red laser beam for the exposure of a latent image on four photosensitive films (cyan, magenta, yellow and black) or other photosensitive media. In these apparatus, the laser beam moves horizontally, dot by dot, line by line, over the entire surface of the film (drum-based imagesetter). The laser is switched on or off according to the "raster" data provided by an external automatic data processing machine. The image thus obtained may contain texts, pictures, drawings, etc., and is used in the preparation of plates for the offset printing industry. The maximum image format is 754 x 635 mm and the resolution ranges from 1,200 to 3,600 dpi.</p> <p>The data for these imagesetters is processed in an external automatic data processing (adp) machine and transmitted to these imagesetters. The desktop publishing (DTP) and raster image processing (RIP) software is presented with the imagesetters; as alternative, an adapted adp machine or hardware to adapt an adp machine may be presented together with the imagesetter.</p>	9006.10	GIR 1 and 6

Product description	Classification	Classification rationale
<p>Imagesetter working with a visible red laser beam for the exposure of a latent image on photosensitive film or other media. In this apparatus, the laser beam is deflected by a rotating mirror and generates an image pixel by pixel, line by line onto film or other photosensitive media. To secure accurate pixel placement, the mirror is placed in an isolated vacuum. The image thus obtained may contain texts, pictures, drawings, etc., and is used in the preparation of plates for the offset printing industry. The maximum page width is 355.6 mm and the resolution ranges from 1,200 to 3,600 dpi. The length of the page can be defined by the user.</p> <p>The apparatus receives the necessary data from an external automatic data processing (adp) machine incorporating desktop publishing (DTP) and raster image processing (RIP) software, which converts the digital data into a form which is readable and usable by the imagesetter. The desktop publishing (DTP) and raster image processing (RIP) software is presented together with the imagesetter but not the external adp machine.</p>	9006.10	GIR 1 and 6
<p>A laser photoplotter comprising an image reproducer, which depends on an external raster image processor (RIP) or an automatic data processing machine for rasterization.</p> <p>It produces a latent colour transparency, which is used to reproduce digital artwork with continuous-tone, on photosensitive film of a width of more than 35 mm (maximum dimensions of the film : 26.5 x 22.5 inches (672.1 x 571.5 mm) and 8.66 x 9.44 inches (220 x 240 mm), respectively), by means of a laser, from digital data provided by an external host automatic data processing (adp) machine by tape or otherwise. It does not photograph or copy actual images and operates in conjunction with an external automatic data processing machine, receiving data which has been thus generated and which is subsequently stored in a suitable computer code or format. For the apparatus to reproduce an image, the computerized data must first be transformed into "raster" data. The rasterization is performed by a RIP (raster image processor) machine. This machine is not included with the apparatus which depends on an external RIP machine or a host automatic data processing machine for rasterization. The adp machine or adp system which provides the data to the RIP machine, is not presented with the apparatus.</p>	9006.10	

Product description	Classification	Classification rationale
<p>A laser photoplotter comprising a keyboard, a screen (cathode ray tube), a raster image processor (RIP) and an image reproducer. It is used to plot or draw a latent "printed circuit board" image on photographic film (positive, negative or merged composite films), which is subsequently used in the production of printed circuit boards (PCB).</p> <p>It creates a latent image on photosensitive film of a width of more than 35 mm (maximum dimensions of the film : 26.5 x 22.5 inches (672.1 x 571.5 mm) and 8.66 x 9.44 inches (220 x 240 mm), respectively), by means of a laser, from digital data provided by an external host automatic data processing (adp) machine by tape or otherwise. It does not photograph or copy actual images and operates in conjunction with an external automatic data processing machine, receiving data which has been thus generated and which is subsequently stored in a suitable computer code or format. For the apparatus to reproduce an image, the computerized data must first be transformed into "raster" data. The rasterization is performed by a RIP (raster image processor) machine, which is included with the apparatus. The adp machine or adp system which provides the data to the RIP machine, is not presented with the apparatus.</p>	9006.59	
<p>A developing machine in which a latent image on an exposed film or other photosensitive media is developed, fixed, washed and dried. The developed product is used for preparing offset printing plates. It is used in combination with an imagesetter.</p>	9010.50	
<p>Laser pointers, which are portable, in the shape of pistols, pens, etc. and designed to function by their own source of energy. They consist of a laser diode and microelectronics in a housing of copper, fitted with a switch. They are battery-powered and some of them are equipped with a chain fixed to a key ring and a clasp, probably of base metal. The laser pointers produce a red visible coherent light beam in the wavelength range between 660-680 nm. They can project a red beam and send a brilliant red dot on an object far away. The laser pointers are commonly used in teaching and presentations to draw audience's attention. Some of them have key rings attached to them.</p>	9013.20	GIR 1 and 6