



HARMONIZED SYSTEM
COMMITTEE
-
25th Session
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(+ Annexes)
O. Fr.

H11-3

Brussels, 23 February 2000.

CLASSIFICATION OF GRAPHIC TABLETS/DIGITIZERS

(Item IX.10 on Agenda)

Reference documents :

42.448 (HSC/22)
42.508 (HSC/22)
NC0160E2, Annex G/17, paragraph 7 (ii) (HSC/24 –Report)

I. BACKGROUND

1. At its 24th Session in October 1999, the Harmonized System Committee examined Doc. 42.448, "Possible amendments to the Explanatory Note to heading 84.71". Following its discussion, the Committee requested the Secretariat to prepare separate documents for the classification of twelve product categories of which "graphic tablets/digitizers" is one (see Annex G/17 to Doc. NC0160E2). The Secretariat requested and received information on these products through the assistance of the International Chamber of Commerce (see Annex II). Having received no input from administrations, the Secretariat presents its own views on the classification of "graphic tablets/digitizers".

II. SECRETARIAT COMMENTS

2. The Secretariat has reproduced below the information presented at the HSC's 22nd Session (see Doc. 42.508) regarding graphic tablets/digitizers.

File No. 2796

Graphic tablets / digitizers : Graphic tablets / digitizers are 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.

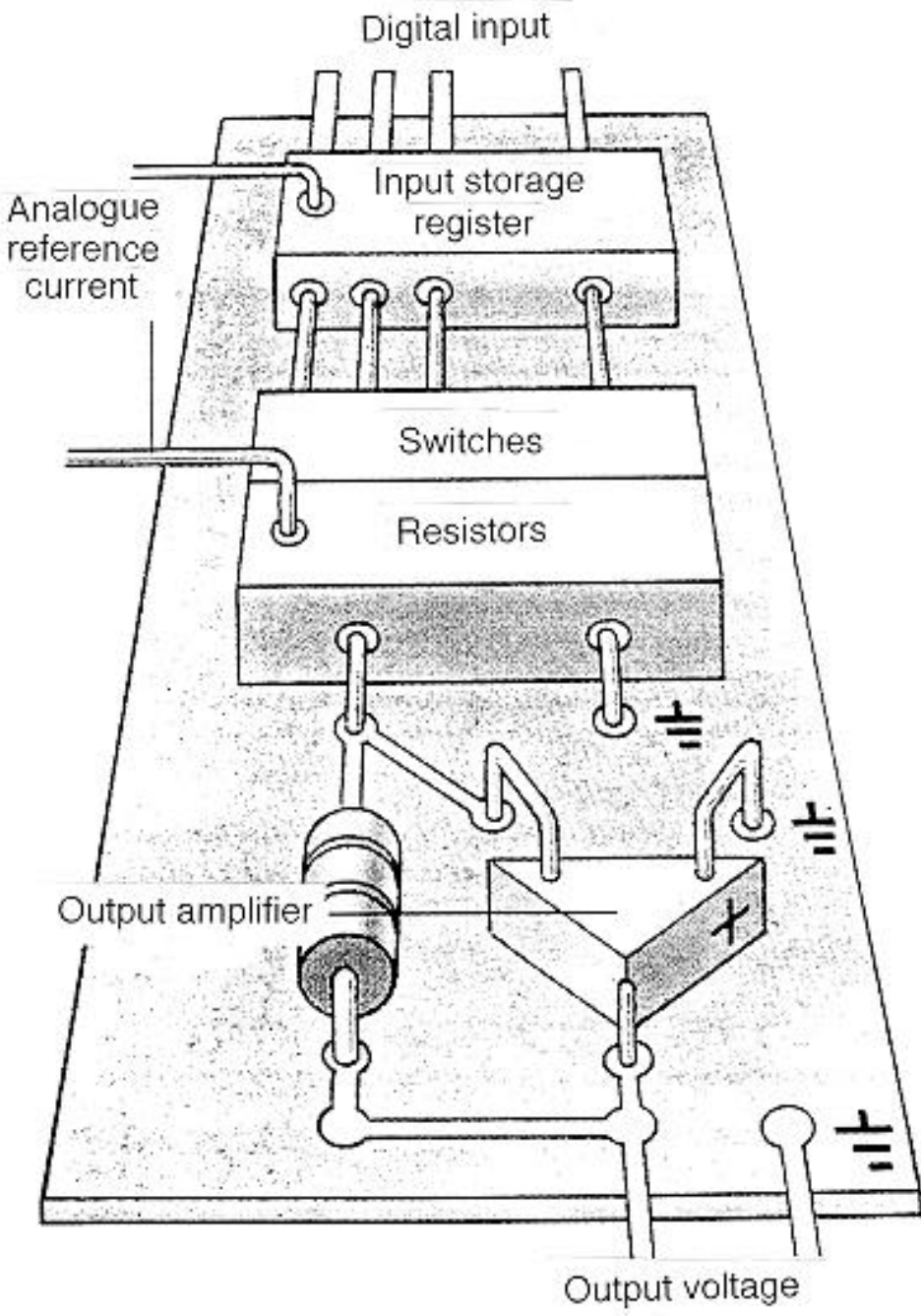
3. On 4 February 2000, the ICC provided more detailed information on the use and operation of the devices in question. Based on that information, a graphic tablet can be defined as an input peripheral making it possible to draw and create using an automatic data processing unit. It permits the user to capture the co-ordinates of a curve or any other geometrical form without using a mouse. The user utilizes a rectangular board corresponding to a computer screen and a pointer or pen to draw, and a zoom linked to a cross-piece, making it possible to input data. There are sensors under the tablet analysing the pointer or pen's movements.
4. In this respect, the Secretariat has included a drawing of the basic structure of a graphic tablet at Annex I hereto.
5. In the Secretariat's opinion, the characteristics of the graphic tablet/digitizer presented above clearly correspond to the characteristics of X-Y co-ordinate input devices, defined in Note 5 (D) to Chapter 84. It would therefore be appropriate to classify this device in subheading 8471.60.

III. CONCLUSION

6. The Committee is invited to rule on :
 - (a) The classification of graphic tablets/digitizers on the basis of the information and the Secretariat's comments provided above, as well as the information in Annexes I and II to this document,
 - (b) Inclusion of a reference to graphic tablets/digitizers in the Explanatory Note to heading 84.71.

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STRUCTURE OF A GRAPHIC TABLET



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INFORMATION PROVIDED BY THE INTERNATIONAL CHAMBER OF COMMERCE (ICC)

GRAPHICS TABLETS

Graphics tablets are input devices for personal computers and computer workstations. Tablets are primarily used for CAD (Computer-Aided Design), DCC (Digital Content Creation of multi-media works and electronic art), and as a user selection control for menu-based applications. Tablets cannot be used independently of a computer.

Tablets are used for several purposes:

1. To input the lines, curves, points and other characteristics of original drawings.
2. To make menu selections specific to the software application executing on the associated computer, commonly using a menu overlay on the platen.
3. To control the viewpoint, orientation, and other aspects of the object being created or modified on the computer.
4. As an alternative to a mouse or other traditional computer pointing and selecting device.
5. To trace and capture an original hard-copy drawing or illustration that is placed on the platen.

A tablet product consists :

- * of a rigid platen, with an active surface region that senses the location and manipulation of a hand-held pointing device,
- * one or more hand-held pointing devices (which may be included or provided separately),
- * an electrical interface to the associated computer, and
- * a method of powering the tablet.

A retail tablet product commonly includes software drivers for one or more computer operating systems, and may include graphics application software.

The pointing device(s) may be wireless, or connected to the tablet with a cable. The electrical interface to the computer may also be wireless (such as infra-red), but is more commonly RS-232 serial, USB (Universal Serial Bus), ADB (Apple Desktop Bus), or one of a few proprietary interface designs, such as Hewlett-Packard HP-HIL (Human Interface Link).

Tablets that use an RS-232 serial or wireless interface to the host computer normally include a separate AC power adapter specific to regional requirements. When other interfaces are employed, such as USB, the tablet may be powered by the host computer, and not include an AC adapter.

Tablets are primarily 2-D (two-dimensional) graphics input devices, but may have limited 3-D capability. Depending on the pointing device(s).

For products described as "tablets", the active sensing region of the platen ranges in size from approximately 2x4 inches to 12x18 inches. A larger platen device also exists but is generally described as "digitizers", and not tablets, although their functions may be similar. Digitizers are used almost exclusively for capture of existing drawings that exist only in hard-copy form.

Tablet pointing devices may assume any shape, but must be small enough to be hand-held and moved around the active sensing region of the tablet. Pens, mice, cross-hair cursors are common shapes. Pointing devices usually include one or more buttons, and may include sliders, wheels, knobs or other valuating controls.

DIGITIZERS

Digitizers are input devices for personal computers and computer workstations. Digitizers are primarily used for capture of existing text, images and artwork for archiving or use in CAD (Computer-Aided Design) Digitizers cannot be used independently of a computer.

A digitizer product consists :

- * of a rigid platen, with an active surface region that senses the location and manipulation of a hand-held pointing device,
- * one or more hand-held pointing devices (which may be included or provided separately),
- * an electrical interface to the associated computer, and
- * a method of powering the digitizer.

A retail digitizer product commonly includes software drivers for one or more computer operating systems, and may include graphics application software.

The pointing device(s) may be wireless, or connected to the digitizer with a cable. The electrical interface to the computer may also be wireless (such as infra-red), but is more commonly RS-232 serial, USB (Universal Serial Bus), ADB (Apple Desktop Bus), or one of a few proprietary interface designs, such as Hewlett-Packard HP-HIL (Human Interface Link).

Digitizers that use an RS-232 serial or wireless interface to the host computer normally include a separate AC power adapter specific to regional mains requirements. When other interfaces are employed, such as USB, the digitizer may be powered by the host computer, and not include an AC adapter.

Digitizers are primarily 2-D (two dimensional) graphics input devices, but may have limited 3-D capability depending on the pointing device(s).

For products described as "digitizers", the active sensing region of the platen is characteristically 9x12 inches or larger. The size range overlaps products known as "graphics tablets", which are similar in function. Tablets are used for creating original art and drawings, as well as application menu selection and on-screen object control. Digitizers are used almost exclusively for capture of existing drawings that exist only in hard-copy form.

Digitizer pointing devices may assume any shape, but must be small enough to be hand-held and moved around the active sensing region of the digitizer. Cross-hair cursors are the most common shape, as they provide the placement precision necessary for accurately capturing coordinates and tracing curved and irregular lines. Pointing devices usually include one or more buttons, and may include sliders, wheels, knobs or other valuating controls.
