**85.23 - Discs, tapes, solid-state non-volatile storage devices, "smart cards" and other media for the recording of sound or of other phenomena, whether or not recorded, including matrices and masters for the production of discs, but excluding products of Chapter 37.**

- Magnetic media :

8523.21 - - Cards incorporating a magnetic stripe

8523.29 - - Other

- Optical media :

8523.41 - - Unrecorded

8523.49 - - Other

- Semiconductor media :

8523.51 - - Solid-state non-volatile storage devices

8523.52 - - "Smart cards"

8523.59 - - Other

8523.80 - Other

This heading covers different types of media, whether or not recorded, for the recording of sound or of other phenomena (e.g., numerical data; text; images, video or other graphical data; software). Such media are generally inserted into or removed from recording or reading apparatus and may be transferred from one recording or reading apparatus to another.

The media of this heading may be presented recorded, unrecorded, or with some pre-recorded information, but capable of having more information recorded on them.

This heading includes media in intermediate forms (e.g., matrices, master discs, mother discs, stamper discs) for use in the mass-production of finished recorded media.

However, this heading does not include the device which records the data on the media or retrieves the data from the media.

In particular, this heading covers :

## (A) MAGNETIC MEDIA

Products of this group are commonly in the form of discs, cards or tapes. They are made using different materials (generally plastics, paper or paperboard, or metal), either magnetic in themselves or coated with a magnetic material. This group includes, for example, cassette tapes and other tapes for tape recorders, tapes for camcorders and other video recording apparatus (e.g., VHS, Hi-8™, mini-DV), diskettes and cards with a magnetic stripe.

This group does not include magneto-optical media.

## (B) OPTICAL MEDIA

Products of this group are generally in the form of discs made of glass, metal or plastics with one or more light-reflective layers. Any data (sound or other phenomena) stored on such discs are read by means of a laser beam. This group includes recorded discs and unrecorded discs whether or not rewritable.

This group includes, for example, compact discs (e.g., CDs, V-CDs, CD-ROMs, CD-RAMs), digital versatile discs (DVDs).

This group also includes magneto-optical media.

## (C) SEMICONDUCTOR MEDIA

Products of this group contain one or more electronic integrated circuits.

Thus, this group includes :

(1) **Solid-state, non-volatile data storage devices for recording data from an external source** (see Note 5 (a) to this Chapter). These devices (also known as "flash memory cards" or "flash electronic storage cards") are used for recording data from an external source, or providing data to, devices such as navigation and global positioning systems, data collection terminals, portable scanners, medical monitoring appliances, audio recording apparatus, personal communicators, mobile phones, digital cameras and automatic data processing machines. Generally, the data are stored onto, and read from, the device once it has been connected to that particular appliance, but can also be uploaded onto or downloaded from an automatic data processing machine.

The media use only power supplied from the appliances to which they are connected, and require no battery.

These non-volatile data storage devices are comprised of, in the same housing, one or more flash memories ("FLASH $E^2$PROM/EEPROM") in the form of integrated circuits mounted on a printed circuit board, and incorporate a connecting socket to a host appliance. They may include capacitors, resistors and a microcontroller in the form of an integrated circuit. Example of solid state non-volatile storage devices are USB flash drives.

(2) **"Smart cards"** (see Note 5 (b) to this Chapter), which have embedded in them one or more electronic integrated circuits (a microprocessor, random access memory (RAM) or read-only memory (ROM)) in the form of chips. "Smart cards" may contain contacts, a magnetic stripe or an embedded antenna but do not contain any other active or passive circuit elements.

These "smart cards" also include certain articles known as "proximity cards or tags" if they meet the conditions of Note 5 (b) to this Chapter. Proximity cards/tags usually consist of an integrated circuit with a read only memory, which is attached to a printed antenna. The card/tag operates by creating a field interference (the nature of which is determined by a code contained in the read only memory) at the antenna in order to affect a signal transmitted from, and reflected back to, the reader. This type of card/tag does not transmit data.

## (D) OTHER

This group includes gramophone records.

This heading **excludes** :

(a) Photographic or cinematographic films with one or several sound tracks (**Chapter 37**).

(b) Sensitised film for photoelectric recording (**heading 37.02**).

(c) Articles intended for use as media for recording sound or other phenomena but not yet prepared as such; these are classified in their respective headings (for example, in **Chapter 39** or **48**, or **Section XV**).

(d) Data-bearing paper tapes or punch cards, the recording of which has been made usually by perforation (**Chapter 48**).

(e) Certain electronic memory modules (e.g., SIMMs (Single In-Line Memory Modules) and DIMMs (Dual In-Line Memory Modules)) which are to be classified by application of Note 2 to Section XVI (see the General Explanatory Note to this Chapter).

(f) Cartridges for game machines (**heading 95.04**).