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- (71) Applicant and  
(72) Inventor: **LE ROUX, Stephen, Craig** [ZA/ZA]; 31 Eleventh Ave Rivonia Santon, P.O. Box 71405 Bryanstein, 2021 Johannesburg (ZA).
- (74) Agent: **LE ROUX, Stephen, Craig**; 31 Eleventh Ave Rivonia Santon, P.O. Box 71405 Bryanston, 2021 Johannesburg (ZA).
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**WO 02/39550 A2**

(54) Title: THE IDENTIFICATION OF ELECTRICAL PLUGS

(57) **Abstract:** The invention is a clear method of identifying what electrical appliance is attached to what plug by the way of touch/feel and sight, enabling the user to be certain of what appliance is to be connected or disconnected to the power supply. The invention allows for user friendliness in the home and work environment thus preventing accidental/un-intentional disconnection of primary and critical electrical equipment. This invention was created with the sighted, partially sighted and blind people, together with child education in mind. This invention reduces the amount of confusion in the home and office environments where numerous appliances are connected at one central point; causing an intentional disconnection of strategic electrical items. The markings are adapted for a universal office/home environment aiding all people to make this identification with ease.

## THE IDENTIFICATION OF ELECTRICAL PLUGS

1 This invention relates to the identification of electrical plugs. It is a common practice to connect a number of electrical plugs to a single electrical socket that is connected to an electrical power supply. As such, a number of electrical appliances such as, for example, the components of a hi-fi system, television set, television signal decoder device, video recorder etc., may all be connected to a single power supply via a number of electrical plugs. The plugs are typically connected to an adapter having a number of sockets for receiving the connecting pins, the adapter having conductor pins for insertion into the power supply socket. Plugs and conductors are often provided in standard configurations and colour, thus making it difficult to distinguish between plugs of different electrical appliances connected to the same electrical socket. It is clear that this arrangement can result in confusion in identifying which plug of a group of plugs is connected to a particular electrical appliance. This is particularly a problem when it is required to disconnect a particular appliance from the electrical power supply. It is an object of the present invention to ameliorate the above identified problem. According to the invention there is provided an electrical plug having at least one marking thereon for identifying the plug as being connected to a particular electrical appliance, in use.

2 The plug may have a distinctive marking thereon in the form of a pictorial representation of an electrical appliance to which the plug is intended to be connected. In another embodiment, the plug may have a distinctive colour that serves to identify the plug, in use, as being connected to a particular electrical appliance. In yet another embodiment of the invention, the plug may have markings thereon in the form of Braille markings which serve to identify the plug as being intended for use with a particular electrical appliance. It will be appreciated that the plug may be marked with one or more of the above markings. The plug may include a plug casing, with the markings being marked on an other side of the plug casing. The plug casing may be in the form of a two-part casing having a base portion and a cover portion that is releasably connected thereto. As such, the cover portion of the plug may have said marking thereon.

- 3 The invention extends to the cover portion of an electrical plug, having said marking thereon for identifying the plug as being connected to particular electrical appliance, in use. The said marking on the plug serves to identify the plug as being connected to a particular appliance. The marking thus serves to distinguish the plug from other similar plugs that may be connected to the same electrical power supply socket.
- 4 Further features of the invention are described hereinafter by way of a non-limiting example of the invention, with reference to and as illustrated in the accompanying diagrammatic drawings. In the drawings Figure 1 shows a schematic three-dimensional view of an electrical plug in accordance with the invention; and Figure 2A and E show schematic plan views of a number of different embodiments of electrical plugs in accordance with the invention.
- 5 With reference to Figure 1 of the drawings, an electrical plug in accordance with the invention, is designated generally by the reference numeral 10. The plug 10 comprises a plug casing designated generally by the reference numeral 12 and three pins (not shown) to which electrical conductors can be connected and which are receivable in compatible electrical sockets. The casing 12 is a two-parting casing having a base portion 14 and a cover portion that is releasably secured to the base portion.
- 6 The electrical plug 10 is intended for use with an electrical appliance in the form of a toaster. As such, an upper surface 18 of the cover portion 16 of the electrical plug, has a pictorial representation 20 of a toaster, marked thereon. In use, the pictorial representation identifies the plug as being connected to a toaster and thus distinguishes the plug from other similar plugs that may be connected to the same electrical adapter/power supply socket and that are in turn each connected to other electrical appliances. In addition to the pictorial representation 20, the surface 18 of the cover portion of the plug, has Braille markings 22 thereon that indicate to visually impaired persons that the plug is connected, in use, to an electrical appliance in the form of a toaster. The Applicant envisages that a range of electrical plugs will be provided for use in an umber of applications, including in domestic households, workshops, and in commercial and industrial applications. The plugs will have both pictorial representations of the electrical appliance to which it is intended to be connected, in use, as well as Braille markings indicative of the particular electrical appliance to which the plug is to be connected.

- 7 With reference to Figures 2A to E, a number of different electrical plugs, in accordance with the invention, are represented. It can be seen that each plug has a different pictorial representation indicating that the plug is intended to be connected to a particular electrical appliance as represented by the pictorial representation on the casing of the plug. As such, the plugs shown in Figures 2A to E, are intended to be connected to a toaster, an iron, a television set, a hair-dryer and a drill. The casing of each of the plugs may have a different distinctive colour which also serves to distinguish between the different plugs that are connected to different electrical appliances. The invention extends to the cover portion of the casing of an electrical plug as described hereinabove.
- 8 The Applicant believes that the electrical plug 10 provides a simple yet convenient means of identifying the plugs that are connected to particular electrical appliances. This obviates the need for having to trace the plug by following an often lengthy electrical cord from the electrical appliance to the plug, before the relevant plug can be identified. In many instances, the electrical socket to which the plugs are connected, may be a great distance from the electrical appliance connected thereto. In other instances, the cables connecting a particular plug to an electrical appliance may not be readily accessible. It is also clear that for visually impaired persons, use of electrical plugs in accordance with the invention will be more convenient and safer to use as it will obviate the need for the person having to feel the electrical appliance and trace the electrical supply cord therefore to the electrical plug connected thereto.

## CLAIMS

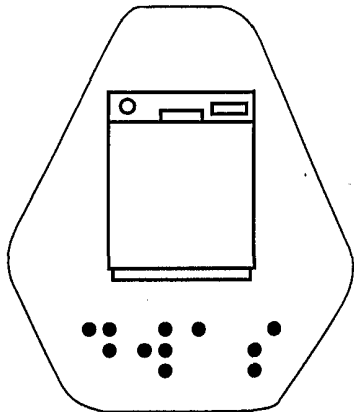
The invention is designed to indicate to users of the electrical plug, what electrical appliance is connected to what plug in the power supply.

The invention is markings on the plug cap or the exterior of the plug cap surface.

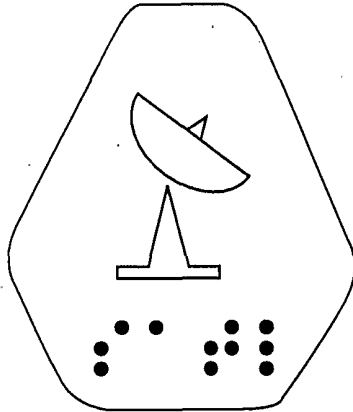
These markings can be in the form of:

Picture representing domestic, industrial and office/commercial electrical appliances/products connected thereto, being that of embossed images, Braille, (contracted/uncontracted) and abbreviations and lettering, screen printed images, stickers and icons.

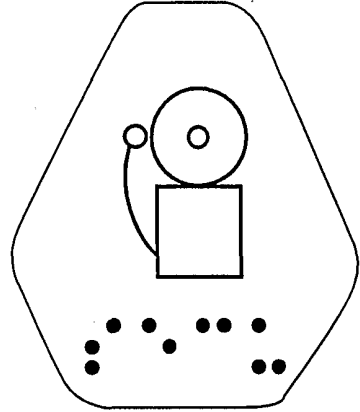
High relief being raised print form in the form of lettering and pictures (icons).



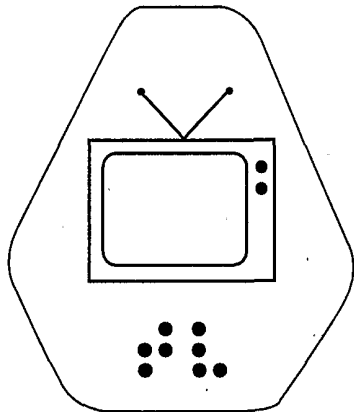
DISH WASHER (DWAS)



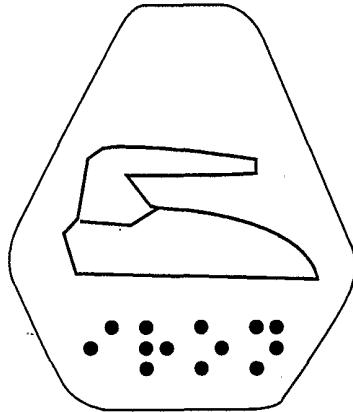
SATELLITE (SATL)



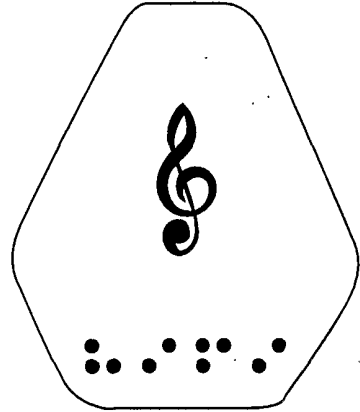
ALARM SYSTEM (SECU)



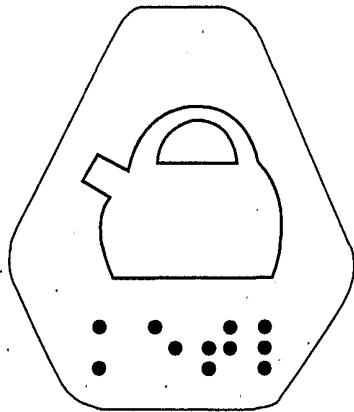
TV (TV)



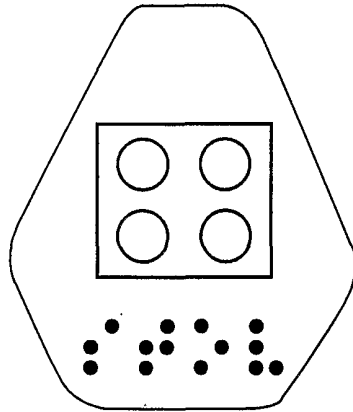
IRON (IRON)



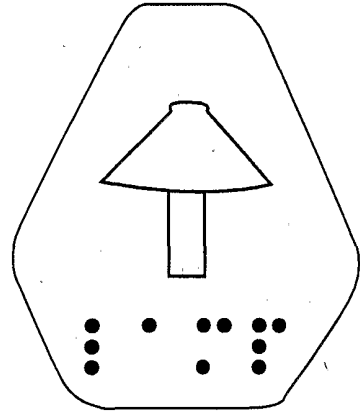
MUSIC SYSTEM (HIFI)



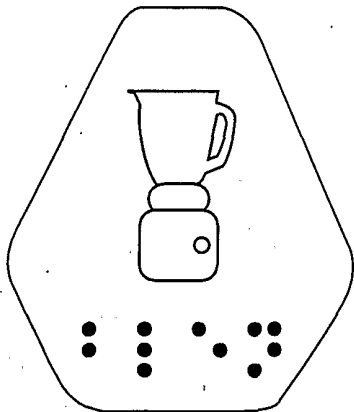
KETTLE (KETL)



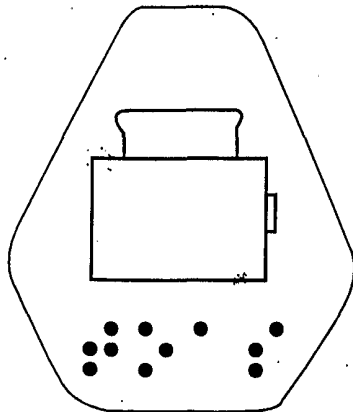
STOVE (STOV)



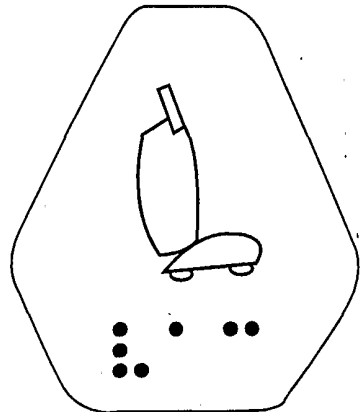
LAMP (LAMP)



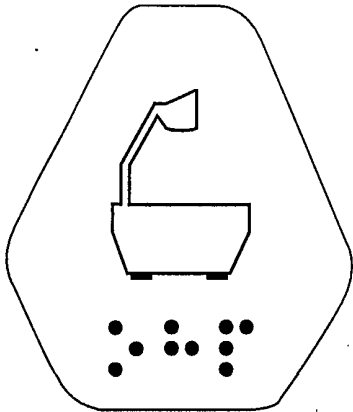
BLENDER (BLEN)



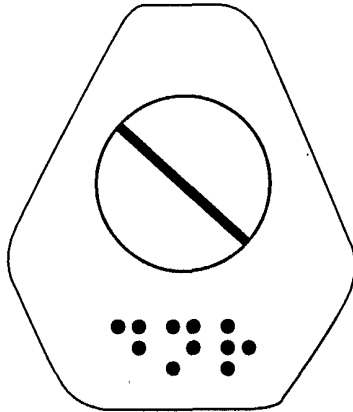
TOASTER (TOAS)



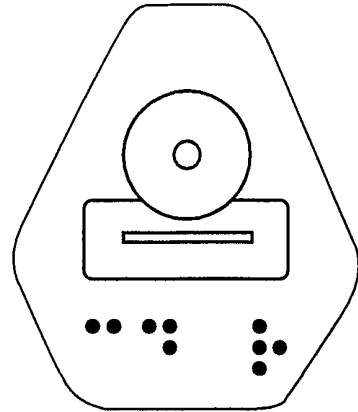
VACUUM (VAC)



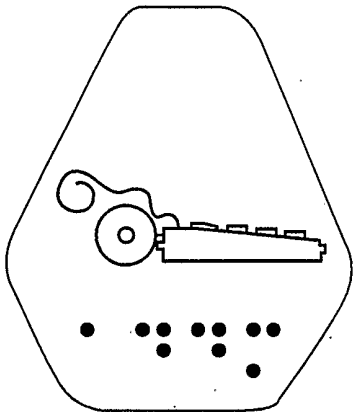
OVERHEAD PROJECTOR (OHP)



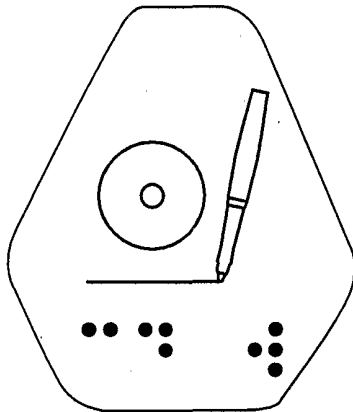
DO NOT REMOVE (DNR)



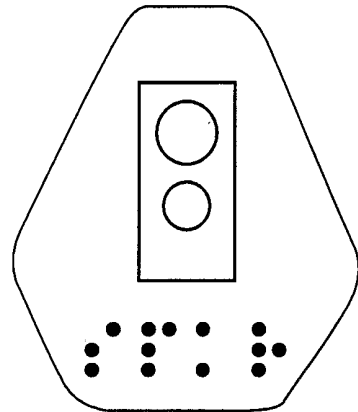
CD ROMM (CD R)



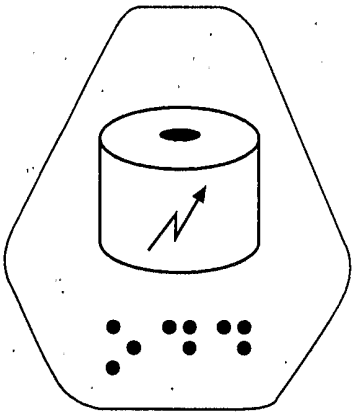
ADDING MACHINE (ADDM)



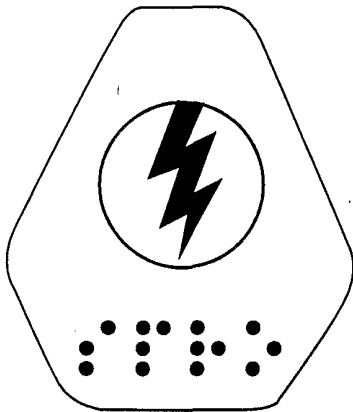
CD WRITER (CD W)



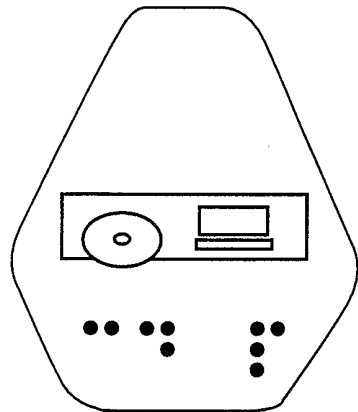
SPEAKER (SPKR)



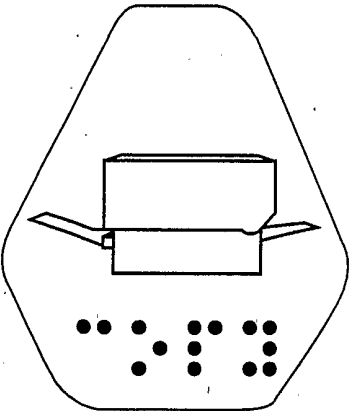
OPTICAL DISK DRIVE (ODD)



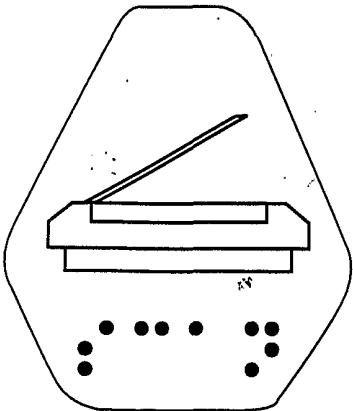
SURGE PROTECTOR (SPRO)



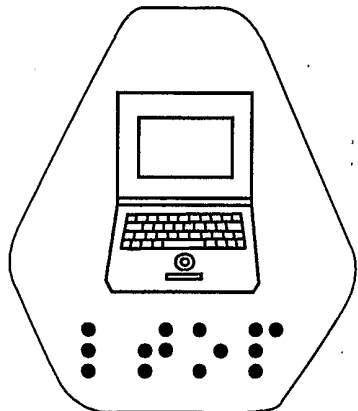
CD PLAYER (CD P)



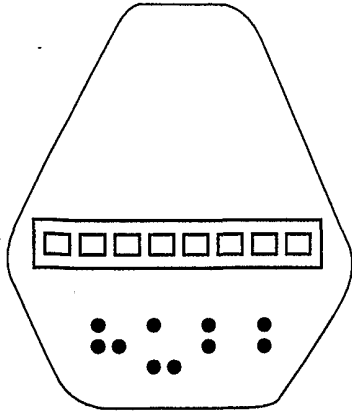
COPIER (COPY)



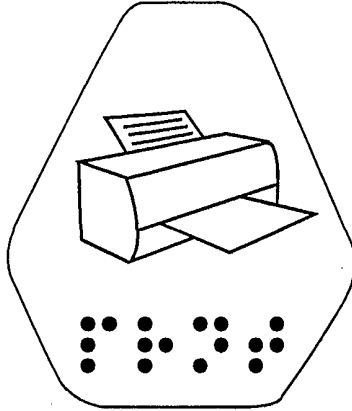
SCANNER (SCAN)



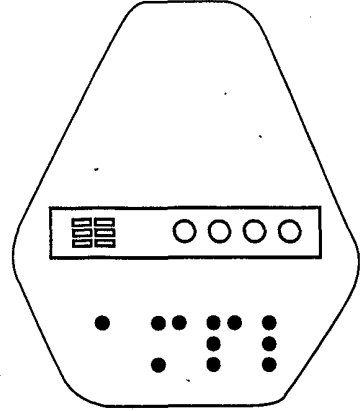
LAPTOP (LTOP)



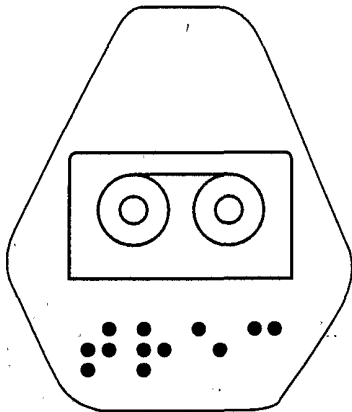
HUBB (HUBB)



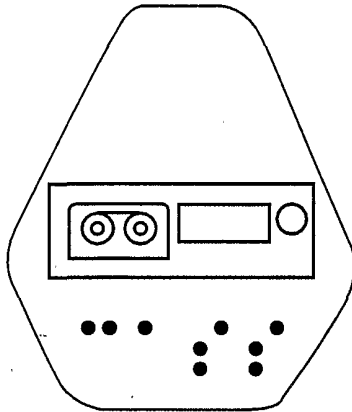
PRINTER (PRNT)



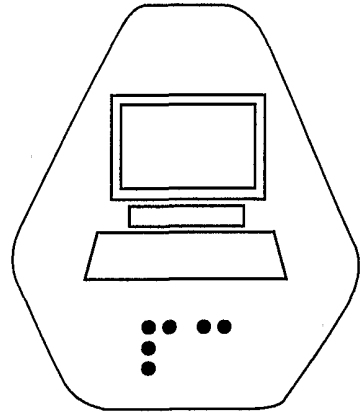
AMPLIFYER (AMPL)



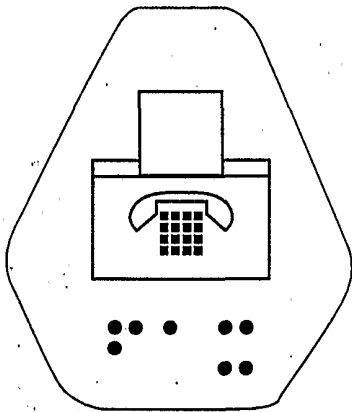
TAPE RECORDER (TREC)



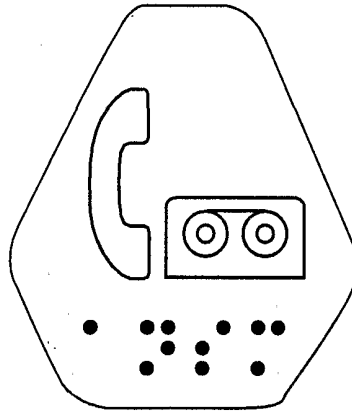
CASSETTE PLAYER (CASS)



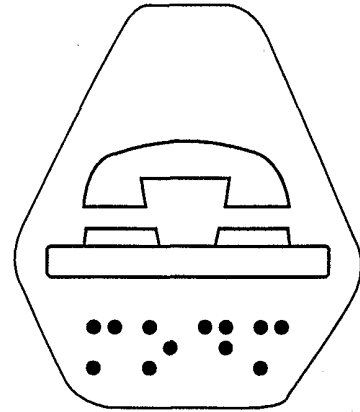
PC (PC)



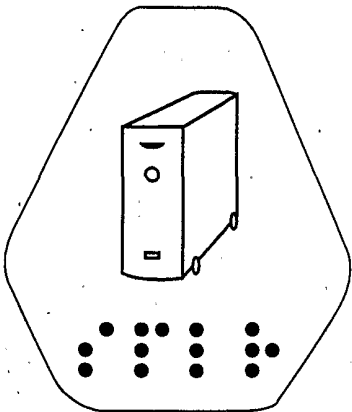
FAX (FAX)



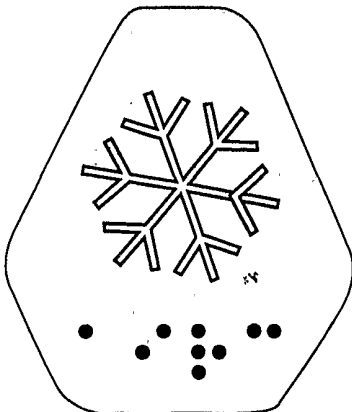
ANSWERING MACHINE (ANSM)



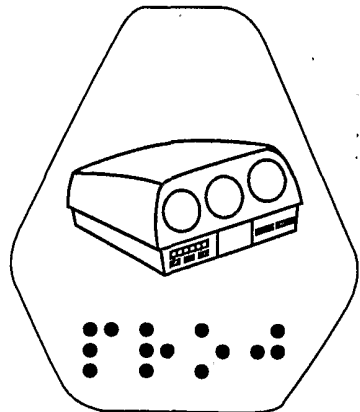
MODEM (MODM)



SPOOLER (SPLR)

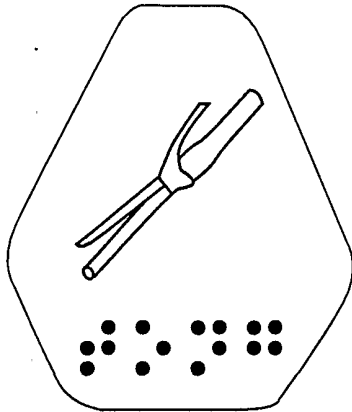


AIR CONDITIONER (AIRC)

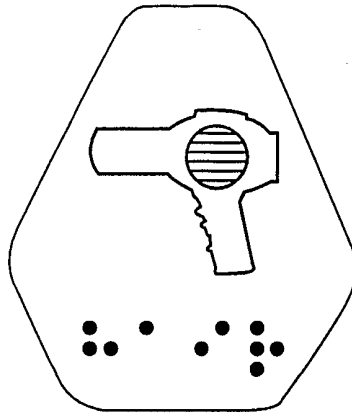


PROJECTOR (PROJ)

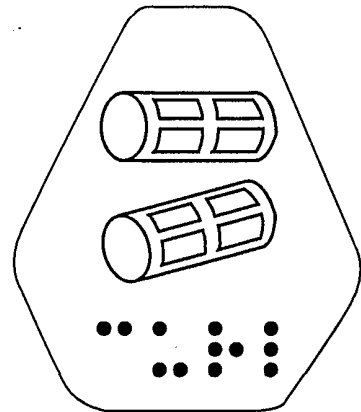




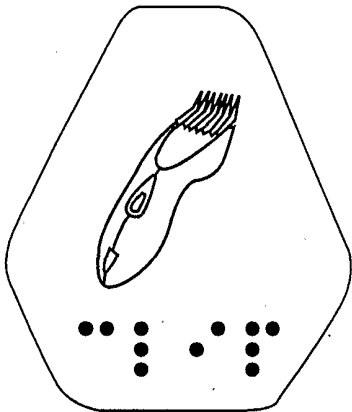
CURLING TONGS (TONG)



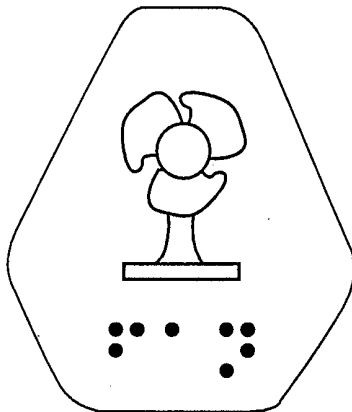
HAIR DRYER (HAIR)



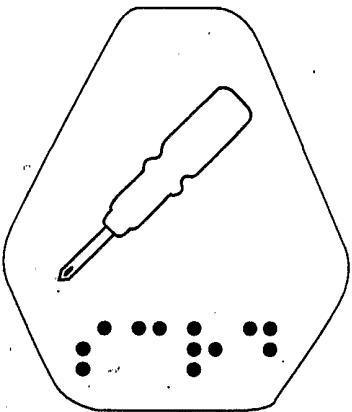
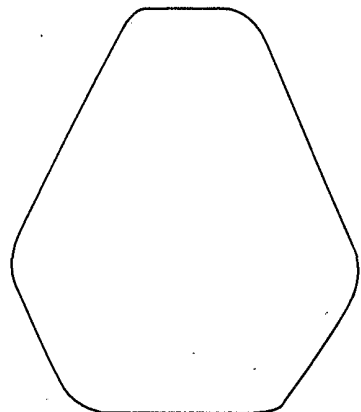
HAIR CURLERS (CURL)



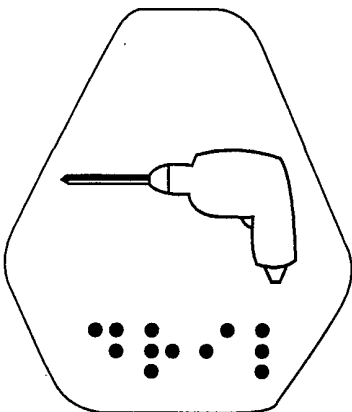
HAIR CLIPPERS (CLIP)



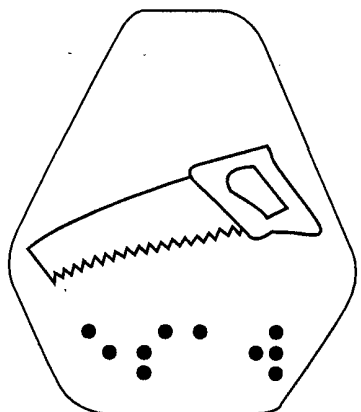
FAN (FAN)



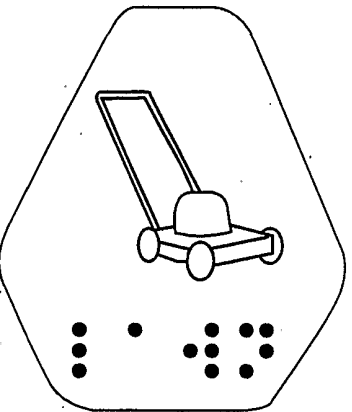
ELECTRIC SCREWDRIVER (SCRD)



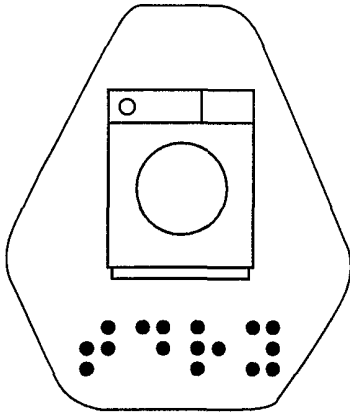
ELECTRIC DRILL (DRIL)



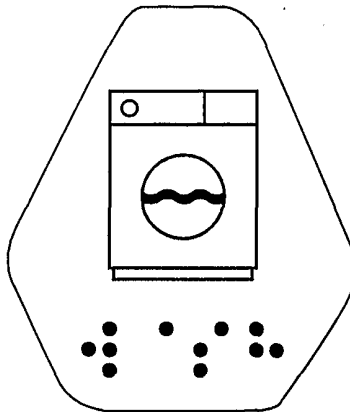
ELECTRIC SAW (ESAW)



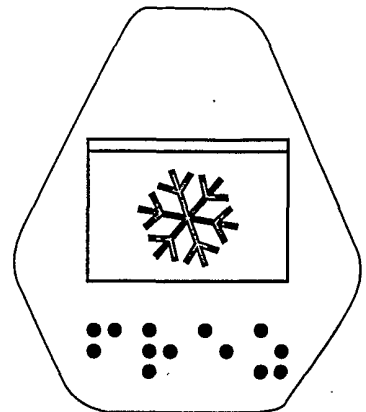
LAWN MOWER (LAWN)



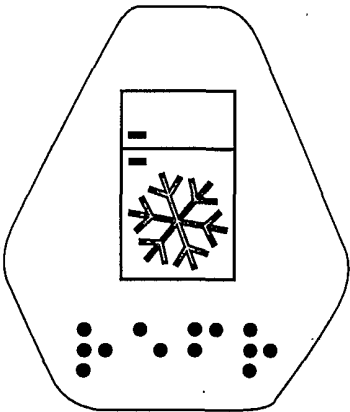
TUMBLE DRYER (TDRY)



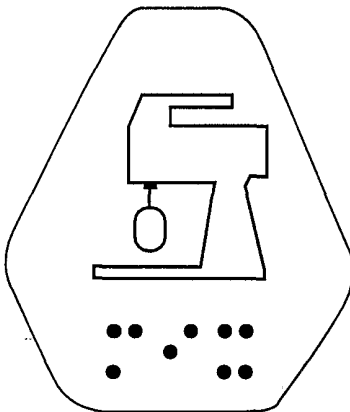
WASHING MACHINE (WASH)



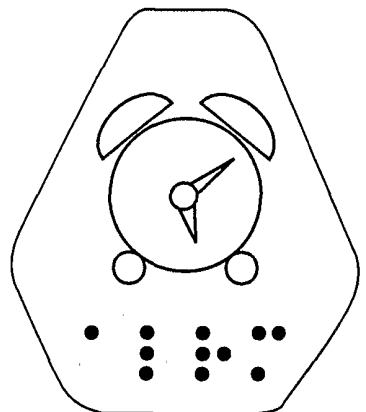
FREEZER (FREZ)



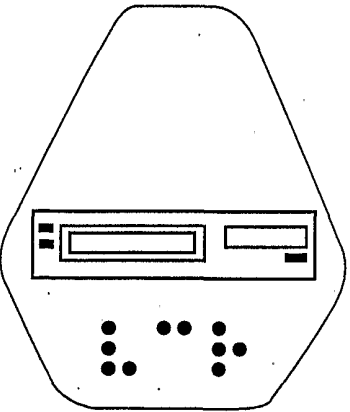
REFRIDGERATOR (REFR)



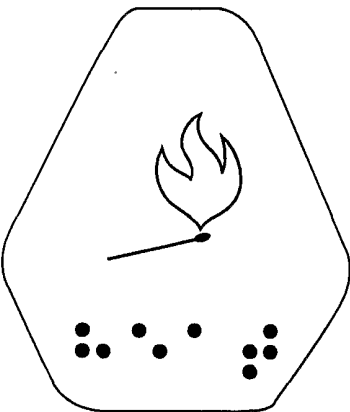
ELECTRIC MIXER (MIX)



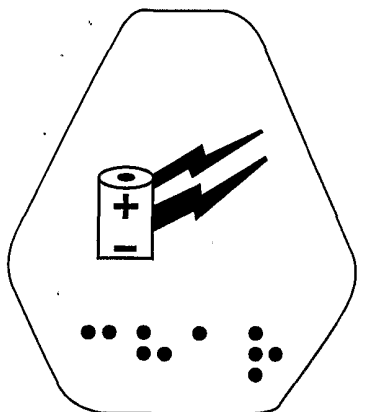
ALARM (ALRM)



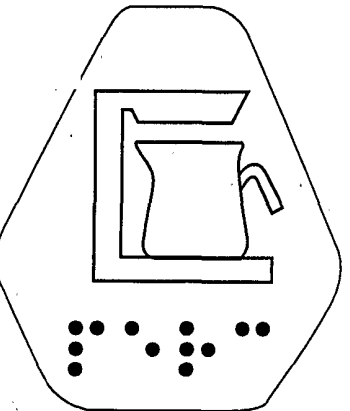
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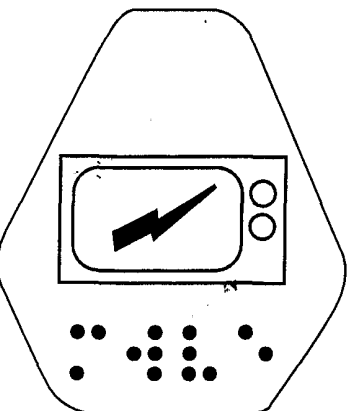
HEATER (HEAT)



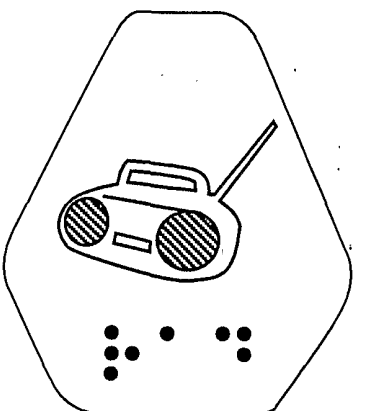
CHARGER (CHAR)



COFFEE PERCULATOR (PERC)



MICROWAVE (MWVE)



RADIO (RAD)