



(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
18.05.2011 Bulletin 2011/20

(51) Int Cl.:
B65D 6/10 (2006.01) **A45C 15/00** (2006.01)
B25H 3/02 (2006.01) **A45C 13/36** (2006.01)

(21) Application number: **10014547.3**

(22) Date of filing: **12.11.2010**

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR
Designated Extension States:
BA ME

(71) Applicant: **Germans Boada, S.A.**
08191 Rubi (Barcelona) (ES)

(72) Inventor: **Torrents i Comas, Josep**
08191 Rubi (Barcelona) (ES)

(74) Representative: **Maldonado Jordan, Julia**
Linares, 7 - 3
46018 Valencia (ES)

(30) Priority: **17.11.2009 ES 200930657 U**

(54) **Tool transport box**

(57) This box is of the type that has at least two hollow bodies (1), that can be fitted to each other to form a closed housing and one that is accessible for opening by means of some hinging and latching means. At least one of the bodies (1) is made up of an inner shell (11) and an outer shell (11) that are joined by some intermediary means and is provided with some openings (12) into which a

music player (2) is fitted that is accessible from the outer or inner face of the body and at least one speaker (3); these speakers (3) facing outwards through some openings or grilles (13) for the distribution of the sound, and said music player (2) being arranged in such a way that the controls for same are accessible from the outside of the box.

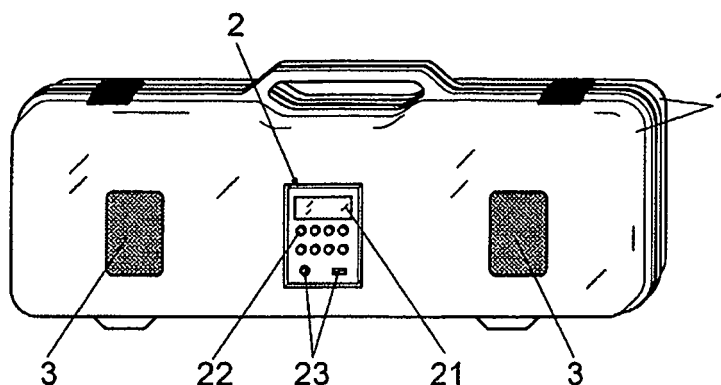


Fig. 1

Description

Object of the invention

[0001] The invention refers to a box for the transport of tools, being of the type that is made of at least two parts that enable the movement between their open and closed positions.

Background to the invention

[0002] At the present time many professionals and DIY enthusiasts transport and store their tools in suitable boxes, made of a light and resistant construction.

[0003] The use of these tool boxes is more or less generalised when the tools are particularly voluminous, even when they are for manual use, such as tile cutting devices, portable electrical machines, sets of spanners, screwdrivers and others.

[0004] These tool boxes are normally made from two hollow bodies connected to each other by some hinging and latching means, allowing the placement of tools and other objects on the inside, said tools being gathered together and protected both during their transport and equally when they are not in use.

[0005] In certain industries, such as the construction industry, it is normal for the workers to place a radio or music player device in their working area so as to listen to music or the news whilst they are working. When they use a small piece of equipment, it is stored together with the tools on the inside of the tool box, which adds to the risk of them getting broken due to knocks and bangs and the entry of dirt to the inside. In other cases, the workers choose to use a bigger music player and which gives a better sound quality; in these cases the music player cannot be transported inside the tool box because of space, so it is necessary to transport it separately, which means some inconvenience for the workers whilst they are transporting one or more tool boxes in addition to the radio.

Description to the invention

[0006] The box for the transporting of tools, object of the invention, has some technical peculiarities aimed at solving the problem stated and allowing a double use as a receptacle for the transporting of tools and also as a support for a radio or music player.

[0007] The tool box object of the invention, being of the type that has at least two hollow bodies fitted with some hinging means and some latching means, has some constructive peculiarities intended at integrating a music player, and at least one speaker. In order to do this, at least one of the bodies of the box is made up from an inner shell and an outer shell that are joined by some intermediary areas fitted with some openings in which the music player and at least one speaker are integrated.

[0008] These speakers are directed outwards by means of some openings or grilles that allow the sound

to be heard. The music player is arranged in such a way that the control devices of same are also accessible from the outside of the box, which allows them to be used from the outside and without having to open the box that contains the tools.

[0009] On the inside of the box, behind the sound player device, there is a rigid protector fixed to the body of the tool box and which makes a structural reinforcement for the body of the box containing the radio and the speakers.

[0010] The music player is by preference a radio and/or player for recordings stored in a digital format, such as an MP3 player with flash memory storage, as one example. These mechanisms have a strong construction, free of moving parts and allow them to be used in environments with dust and dirt without suffering from any appreciable deterioration. This box has the advantage that it enables the simultaneous transport of the tools and at the same time acts as a music player; said box being, when it is empty, as a sound box for the speakers themselves, in a similar way to the much bigger music players.

[0011] In a first embodiment of the music player and the speakers are assembled in the same body, and connected by some connecting cables fitted and protected on the inside of the box, in such a way that said cables do not pass through the areas of the hinges of the box bodies.

[0012] In a specific embodiment of the invention the connecting cables of the music player with the speakers are fitted in between the two shells that make up the body of the tool box itself.

Description of the figures.

[0013] In order to complete the description that is being made and for the purpose of providing a better understanding of its characteristics, a set of drawings is attached to this present description in which the figures being by way of illustration and are not by way of limitation on the invention, in which the following is shown:

- Figure 1 shows a perspective view of an example of an embodiment of the box.
- Figure 2 shows a detail of a transverse section of the box showing the arrangement of the music player and the reinforcing protector.
- Figure 3 shows a detail of a transverse section of the box showing the arrangement of one of the speakers.

Preferred embodiment of the invention

[0014] In the example of the embodiment shown in the referenced figures, the box for transport of the tools is made up of two hollow bodies (1), that fit together and are connected to each other by some hinging and latching means.

[0015] Each body (1) is made up of an outer shell (11)

for protection and an inner shell (11) into which the tools to be housed are placed.

[0016] Both shells are joined by some intermediary areas with some openings (12) into which a music player (2) is incorporated, in this case a radio with an MP3 player, and some speakers (3), facing towards the outside of the tool box.

[0017] The music player (2) is accessible from the outside or the inside of the body (1), and is fixed to the tool box by means of some polycarbonate structural reinforcement (4), which makes a structural reinforcement and internal fixing. In the example shown the music player (2) has a display screen (21) on its outer surface, some control devices (22) and electrical and audio connections (23), more specifically some connections (23) for the storage memory and a connection for earphones (23).

[0018] The speakers (3) are facing some grilles (13), fitted into the openings (12) for the exit of the sound to the outside. The cables (31) between the music player (2) and the speakers (3) are housed in a protected manner between the two shells (11).

[0019] As and how stated this arrangement of the speakers enables the tool transport box to act as a sound box both when it is empty and equally when the tools are kept on the inside of the box.

[0020] Once having sufficiently described the nature of the invention, likewise having given a preferred embodiment it is placed on record that the materials, shape, size and arrangement of the elements described can be modified provided that they do not mean an alteration of the basic essentials of the invention that are claimed below.

Claims

1. A box for the transport of tools, being of the type that has at least two hollow bodies (1), that can be fitted to each other to form a closed housing and that is accessible for opening, preferably by means of some hinging and latching means, allowing tools and other objects to be placed inside said housing for storage and transport, **characterised in that** at least one of the bodies (1) is made up of an inner shell (11) and an outer shell (11) that are joined by some intermediary area provided with some openings (12) into which a music player (2) is fitted that is accessible from the outer or inner face of the body and in addition at least one speaker (3); these speakers (3) facing outwards through some openings or grilles (13) for the distribution of the sound, and said music player (2) being arranged in such a way that the controls for same are accessible from the outside of the box.
2. A box, according to claim 1, **characterised in that** on the inside, behind the music player, there is a rigid structural reinforcement (4) joined to the material of the body (1) and which makes a structural reinforcement

ment of said body (1).

3. A box, according to any of the above claims, **characterised in that** the speakers (3) are connected to the music player (2) by some connecting cables fitted and protected on the inside of the box.
4. A box, according to claim 4, **characterised in that** the connecting cables are fitted between the two shells (11) of the body (1) of the box.

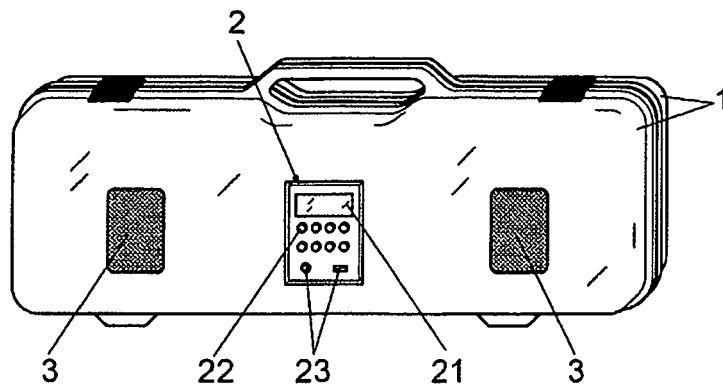


Fig. 1

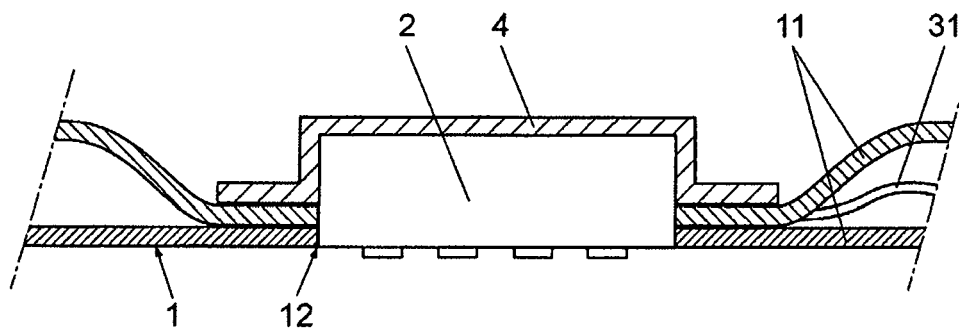


Fig. 2

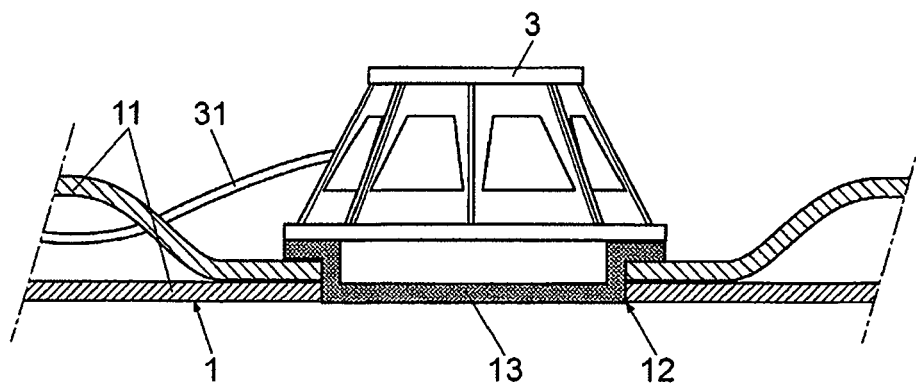


Fig. 3



EUROPEAN SEARCH REPORT

Application Number
EP 10 01 4547

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 5 979 175 A (ELLISON PETER L [US]) 9 November 1999 (1999-11-09) * column 1, line 34 - column 4, line 6 * -----	1-4	INV. B65D6/10 A45C15/00 B25H3/02
X	EP 1 685 929 A1 (HITACHI KOKI KK [JP]) 2 August 2006 (2006-08-02) * paragraph [0051] - paragraph [0090] * -----	1-4	ADD. A45C13/36
A	DE 81 05 612 U1 (ELBOTAINER KUNSTSTOFF- UND VERPACKUNGSGESELLSCHAFT MBH) 11 June 1981 (1981-06-11) * the whole document * -----	1	
			TECHNICAL FIELDS SEARCHED (IPC)
			A45C B65D B25H
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 24 February 2011	Examiner Koob, Michael
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

2
EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 10 01 4547

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

24-02-2011

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5979175	A	09-11-1999	NONE	

EP 1685929	A1	02-08-2006	CN 1814415 A	09-08-2006
			JP 2006205323 A	10-08-2006
			US 2006170395 A1	03-08-2006

DE 8105612	U1	11-06-1981	NONE	
