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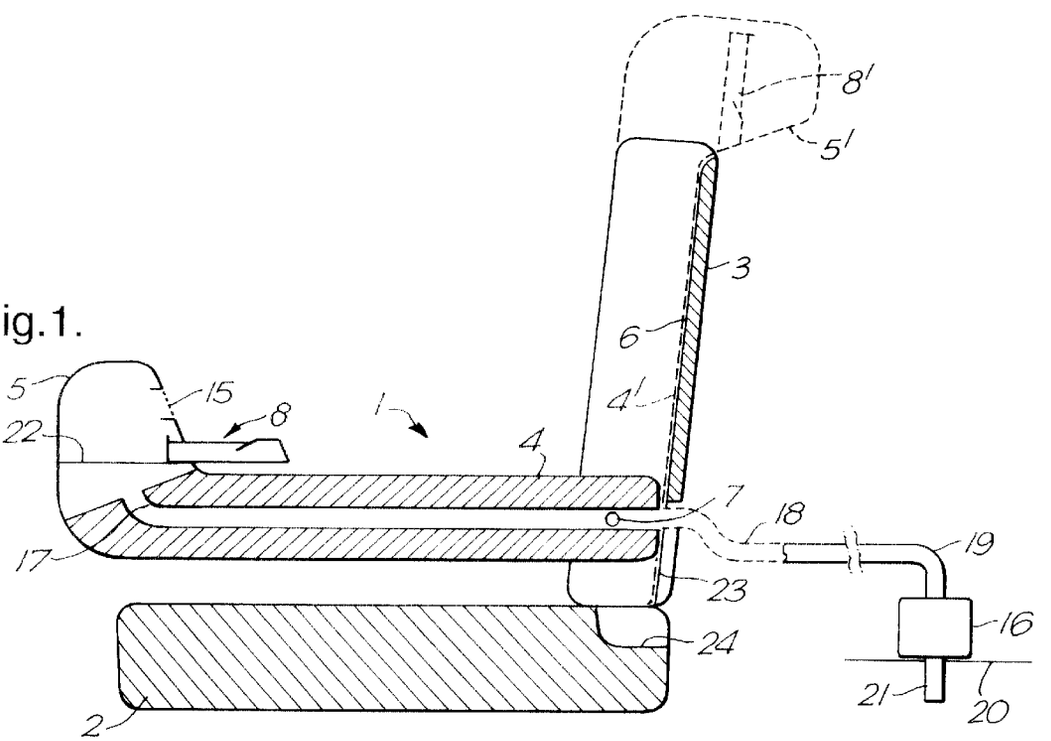
(54) Improvements relating to smokers' requisites

(57) An ashtray is mounted by mounting means for movement between an orientation for use and a storage orientation. The configuration of the ashtray is such that during the movement from the usage to the storage orientation, ash becomes contained in an ash containment space of the ashtray.

Fig.1.



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Description

The subject invention relates to smokers' requisites.

According to a first aspect thereof the subject invention provides a smokers' requisite assembly comprising an ash receptacle and housing means, said receptacle and said housing means being interrelated to provide for said receptacle being in a storage condition within said housing means or being in a condition of use, said receptacle and said housing means being movable together between first and second orientations of said receptacle, and the interior of said receptacle being bounded by first and second wall means, in the first orientation of said receptacle the first wall means providing first side wall means and the second wall means providing partial ceiling means extending from said first side wall means, whereas in the second orientation of said receptacle said first wall means is floor means and said second wall means is second side wall means, said floor means and said second side wall means bounding an ash retaining space of said receptacle.

Preferably, the ash receptacle is movable relatively of the housing means so that the receptacle can be moved, from the position in said housing means, in a direction outwardly of the housing means to the position of use of the receptacle. The movement of the ash receptacle relatively of the housing means is advantageously linear movement. An alternative is for the receptacle to be swivelably movable relatively of the housing means.

Suitably, the assembly further comprises arm means and mounting means, the housing means being mounted of the arm means and the mounting means mounting the arm means such that in a first position of the arm means the ash receptacle is in said first orientation thereof and in a second position of the arm means the receptacle is in the said second orientation thereof. The arm means can be an armrest, which armrest can be associated with seat means. The seat means may provide the mounting means. The seat means may be vehicle seat means. An armrest providing the arm means is preferably movable upwardly between the said first and second positions.

The smokers' requisite assembly may be in association with air extraction means, which air extraction means is operable to draw air from the environment of the ash receptacle when the receptacle is in the condition of use thereof.

According to a second aspect thereof, the subject invention provides a smokers' requisite assembly comprising an ash receptacle and mounting means, said mounting means mounting said receptacle such that said receptacle can be moved between first and second orientations thereof, and the interior of said receptacle being bounded by first and second wall means, in the first orientation of said receptacle the first wall means providing first side wall means and the second wall means providing partial ceiling means extending from said first side wall means, whereas in the second orientation of said receptacle said first wall means is floor means and said second wall means is second side wall means, said floor means and said second side wall means bounding an ash retaining space of said receptacle.

An assembly in accordance with the second aspect of the subject invention may comprise housing means, which housing means receives the ash receptacle when the receptacle is in the second orientation thereof. Such housing means may be a fixed housing means.

The mounting means of an assembly in accordance with the second aspect of the subject invention may comprise pivotally movable arm means, the ash receptacle being mounted of the arm means.

In order that the subject invention may be clearly understood and readily carried into effect reference will now be made, by way of example, to the diagrammatic drawings herewith, in which:

Figure 1 shows a rear passenger seat of an automobile, the view being taken at a vertical plane centrally of the seat;

Figure 2 shows, at an enlarged scale and in cross-section, an ash receptacle of the seat of Figure 1;

Figure 3 shows a scrap view of Figure 1 with an armrest of the seat being in an upwardly extending stowed position; and

Figures 4a and 4b show a wall mounted smokers' requisite assembly.

The seat of Figure 1, which is generally designated by reference numeral 1, comprises a seat cushion 2, a backrest 3 and a pivotable armrest 4 located centrally of the seat 1. A housing 5 is attached to the armrest 4 at the distal end thereof.

The backrest 3 comprises a recess 6 appropriately shaped and dimensioned for receiving the armrest 4 when the armrest 4 is pivoted upwardly from the position of use (the position thereof shown in Figure 1) to a stowed, upwardly extending position. The armrest 4 in the stowed position thereof is indicated in Figure 1 by broken line 4'.

Armrest 4 is pivotable about a pivot axis 7 by a mechanism, known *per se* in the automobile industry, which imparts a composite motion to the armrest 4 when it is moved between the position of use thereof and the stowed position. The mechanism thus provides not only a simple pivotable movement about the axis 7, but also provides for movement of the axis 7 such that when the armrest 4 is moved from the stowed position, pivot axis 7 is raised, and when the armrest 4 is moved to the stowed position the pivot axis 7 is lowered such that the armrest 4 is received in the recess 6 with the lower, proximal end of the armrest 4 in contact with or immediately adjacent to the seat cushion 2.

An ash receptacle taking the form of an ashtray 8 is longitudinally slidably received in the housing 5,

whereby the ashtray 8 may be wholly or substantially wholly received in a stowed position in the housing 5, and may be pulled outwardly of the housing to a position of use, which latter position is depicted in Figure 1. When the ashtray 8 is in the stowed position thereof, it is maintained in that position by first retaining means (not shown), taking the form, for example, of spring latch means or friction means, so that when it is required to move the ashtray 8 to the position of use thereof, it is first necessary to overcome the retaining force of the first retaining means.

When the ashtray 8 is in the stowed position thereof and the armrest 4 is in the position of use thereof, the ashtray is in a first orientation thereof.

With reference to the enlarged view (Figure 2) of the ashtray 8, the ashtray 8 comprises a base wall 9, an upper wall 10, a rear end wall 11, a front end wall 12 and side walls, one of which side walls, designated by reference numeral 13, is shown in Figure 2. The ashtray 8 further comprises a transverse ash deflector plate 14 which extends downwardly from the inner end of upper wall 10.

In use of the ashtray 8, ash and/or other material is deposited therein and thereafter rests on the base wall 9. When the armrest 4 is to be moved from the position of use thereof to the stowed position, the ashtray 8 is first slid to a stowed condition thereof within housing 5. As the armrest 4 is pivoted upwardly, the material within the ashtray 8 slides under the influence of gravity and/or vibration towards the front end wall 12 of the ashtray 8. During such pivotal movement, the ashtray 8 is maintained in the stowed position by the action of the aforementioned retaining means. When the armrest 4 has been placed in the stowed position, the ashtray 8 is located and orientated (second orientation) as is indicated by broken lines 8'. In this orientation, the walls 9, 10 and 12, together with the deflector plate 14, provide an enclosed space or pocket in which the ash and/or other material is contained. Therefore, in raising the armrest 4 for stowing, the material in the ashtray 8 is effectively contained therein, i.e. is prevented from being dispersed therefrom.

By manipulation of second retaining means (not shown), the ashtray 8 can be removed completely from the housing 5, when the armrest is in the position of use thereof, thus to facilitate removal from the ashtray 8 of material deposited therein.

At the front of the housing 5, above but close to the location of the ashtray 8, there is located an air inlet 15 taking the form of a grill. Reference numeral 16 designates an air induction fan, which fan is drivable by electric motor means (not shown). The air inlet grill 15 is in air flow communication with the fan 16 via the hollow interior of the housing 5, ducting 17 extending within and lengthwise of the armrest 4, a flexible and extendible hose section 18 and a pipe 19. Reference numeral 20 designates the floor wall of a luggage compartment or boot of the automobile within which seat 1 is located. As may be observed from Figure 1, a short exhaust pipe 21 extends from the fan 16 through the wall 20. Thus in operation of the fan 16, air is drawn from the environment above and in the region of the ashtray 8 and is expelled to the exterior of the automobile. Advantageously, the moving of the ashtray 8 to the position of use thereof, i.e. sliding the ashtray 8 forwardly of the housing 15, activates a microswitch (not shown) which causes activation of the fan 16. It may be also arranged that when the ashtray 8 is moved to the stowed position within the housing 15, timing means (not shown) is operable to ensure that the fan 16 remains in a operative mode for a predetermined short period of time, e.g. several minutes. Air will then continue to be drawn in through the grill 15 and about the sides of the stowed ashtray 8. Guide means 22 disposed within the housing 5 for guiding movement of the ashtray 8 is either of such width less than the width of the housing 5 that passages exist to each side of the guide means 22 for the passage of air to the fan 16, or, if the guide means extends over the full width of the housing 5, openings are provided in the guide means 22 for the passage of air.

As may be observed from Figure 1, when the armrest 4 is in the position of use thereof, the hose section 18 extends through a slot 23 in that rear part of the backrest 3 which bounds the recess 6 therein. The slot 23 is in alignment with a slot 24 in the seat cushion 2. Thus when the armrest 4 is moved to the stowed position thereof, the hose section 18 is moved downwardly in the slot 23, and when the armrest 4 has been positioned in the stowed position, that portion of the hose section 18 adjacent the lower end of the armrest 4 is located in the slot 24 of the seat cushion 2 (see Figure 3). In this manner it is ensured that a sharp bending and flattening of the hose section 18 in the vicinity of the lower end of the armrest 4 is avoided and thus that, even when the armrest 4 is in the stowed position, full and effective air-flow communication between the air inlet grill 15 and the air induction fan 16 is possible.

In Figures 4a and 4b reference numeral 30 designates the wall of a room. Fixedly attached to the wall 30 is a bracket 31 and pivotally secured at the distal end of the bracket 31 is an arm 32. Mounted on the arm 32 is an ashtray 33 of the same configuration as ashtray 8 of Figure 2.

In Figure 4a the arm 32 and the ashtray 33 are horizontally orientated and the ashtray 33 is in a condition for use. In Figure 4b the arm 32 and the ashtray 33 are shown in a vertical, storage condition.

Item 34 of Figures 4a and 4b is a housing, which housing 34 is vertically slidably mounted (by means not shown) on the wall 30. The arrangement is such that when the arm 32 has been moved to the vertical position thereof as depicted in Figure 4b, the housing can be slid downwardly over the arm 32 and the ashtray 33, being slid upwardly again and clear of the ashtray 33 when it is desired to move the ashtray 33 to the position of use again.

As an alternative to the assembly shown in Figures 4a and 4b, it may be arranged, by means of alternative mounting means (not shown), for an ashtray as per ashtray 33 to be moved, slidably for example, from a horizontal position of use thereof to a vertical, storage position within a housing which, unlike the housing 34, is fixedly secured to and relatively of a vertical wall.

Claims

1. A smokers' requisite assembly comprising an ash receptacle and housing means, said receptacle and said housing means being interrelated to provide for said receptacle being in a storage condition within said housing means or being in a condition of use, said receptacle and said housing means being movable together between first and second orientations of said receptacle, and the interior of said receptacle being bounded by first and second wall means, in the first orientation of said receptacle the first wall means providing first side wall means and the second wall means providing partial ceiling means extending from said first side wall means, whereas in the second orientation of said receptacle said first wall means is floor means and said second wall means is second side wall means, said floor means and said second side wall means bounding an ash retaining space of said receptacle.

2. An assembly according to Claim 1, wherein said assembly further comprises arm means and mounting means, said housing means being mounted of said arm means and said mounting means mounting said arm means such that in a first position of said arm means said receptacle is in said first orientation thereof and in a second position of said arm means said receptacle is in the said second orientation thereof.

3. An assembly according to Claim 2, wherein said arm means in an armrest of seat means.

4. An assembly according to Claim 3, wherein said mounting means is mounting means of said seat means.

5. An assembly according to Claim 3 or 4, wherein said seat means is a vehicle seat means.

6. An assembly according to any one of Claims 3 to 5, wherein in moving said armrest from the first to the second position thereof, said armrest is moved upwardly.

7. An assembly according to any one of the preceding claims, wherein said assembly is in association with air extraction means, which air extraction means is operable to draw air from the environment of said ash receptacle when said receptacle is in the condition of use thereof.

8. A smokers' requisite assembly comprising an ash receptacle and mounting means, said mounting means mounting said receptacle such that said receptacle can be moved between first and second orientations thereof, and the interior of said receptacle being bounded by first and second wall means, in the first orientation of said receptacle the first wall means providing first side wall means and the second wall means providing partial ceiling means extending from said first side wall means, whereas in the second orientation of said receptacle said first wall means is floor means and said second wall means is second side wall means, said floor means and said second side wall means bounding an ash retaining space of said receptacle.

9. An assembly according to Claim 8, wherein said assembly further comprises housing means and said receptacle is, when in the second orientation thereof, received in said housing means.

10. An assembly according to Claim 9, wherein said housing means is fixed housing means.

11. An assembly according to any one of Claims 8 to 10, wherein said mounting means comprises pivotally movable arm means and said receptacle is mounted of said arm means.

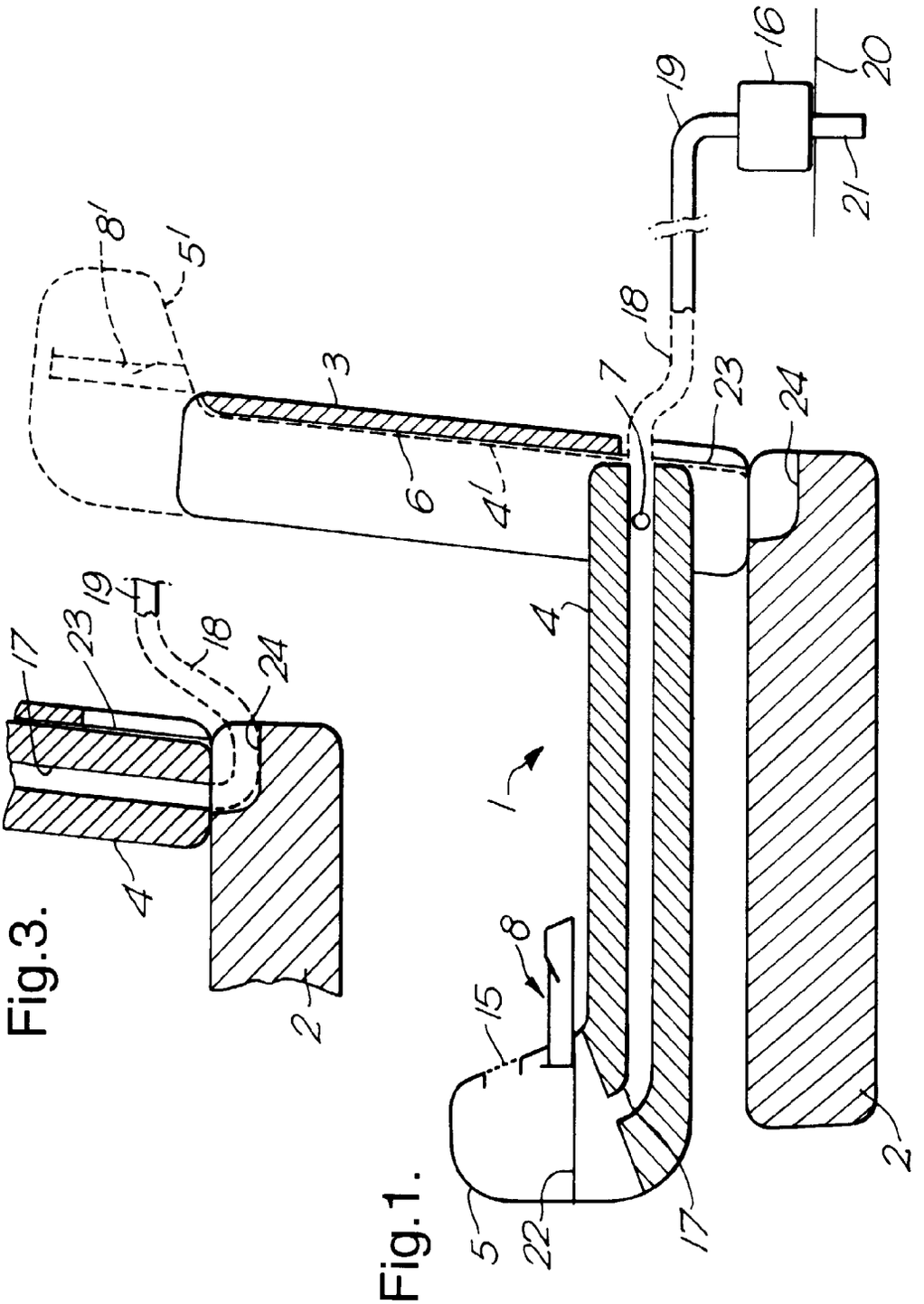

Fig.1.

Fig.3.

Fig.2.

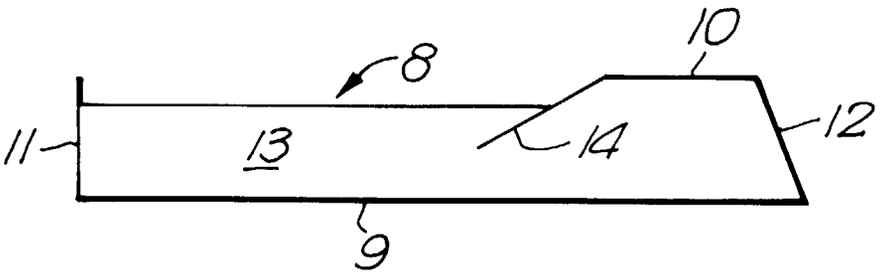

Fig.4a.

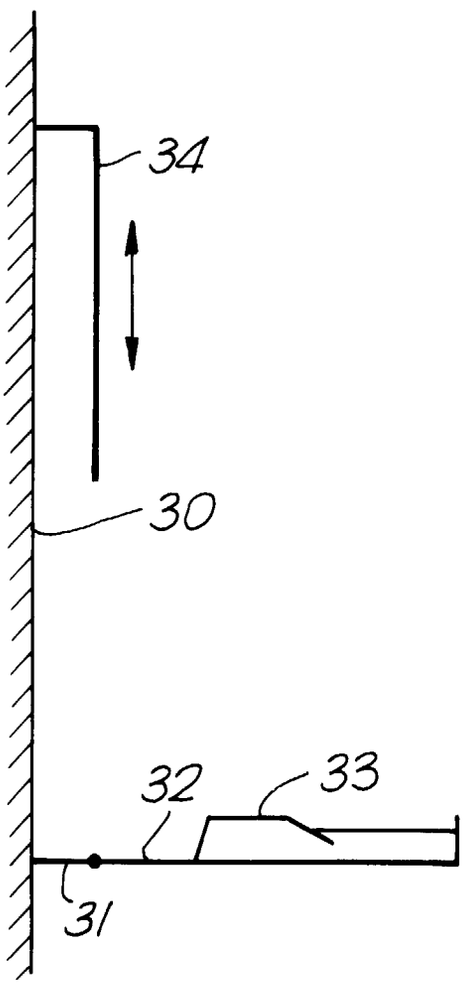

Fig.4b.