

PATENTS EXAMINATION BOARD

Subject: The Drafting of Patent Specifications - Paper 2
Date: July 2010
Time: 09h00-13h00
Duration: Four hours (Candidates requiring extra time are entitled to an additional two hours)
Examiners: J D Whittaker
K Bredenkamp
Moderator: K E F Brown

Attached is an instruction from your client detailing an invention as well as prior art.

You are required to draft a full patent specification for your client's invention taking into account the prior art. The full patent specification must include: (1) a background to the invention, (2) a summary of the invention, i.e. consistory clauses, (3) a brief description of the drawings, (4) a detailed description of the invention, (5) a set of patent claims, and (6) an abstract.

Marks will be allocated as follows:

- 50% of the marks will be allocated to the claims.
- 50% of the marks will be allocated to the rest of the specification.

In order to obtain a pass for this paper, candidates must obtain not less than 40% for each of these two sections.

Your client writes:

"It is convenient to store medicinal tablets in a container having a dispensing mechanism for selectively dispensing the tablets when required.

A conventional container is shown in Figures 1 and 2 of the drawings on the attached page headed "PRIOR ART". The container includes an outer tube 1 which is closed at one end and which has an inwardly extending flange 2 at the other end. An inner tube 3 is contained within the outer tube 1, as shown. The inner tube 3 is closed at both ends but defines an opening 4 in the side thereof. This opening 4 is in vertical alignment with a similar opening 5 in the side of the outer tube 1.

At the bottom of the outer tube 1 is a compression coil spring 6 which automatically biases the inner tube 3 upwards against the flange 2, thereby holding the openings 4 and 5 out of alignment and securely closing the container (see Figure 2).

To open the container, the inner tube 3 is pressed down, against the bias of the coil spring 6, by inserting a finger through an opening 7 in the top of the outer tube 1. The openings 4 and 5 are so positioned that when the inner tube 3 has been pressed down as far as possible, the openings 4 and 5 are aligned with one another so that tablets may readily be dispensed from the container.

Although the container described above works relatively well, it does not include means to prevent unsupervised opening by small children. Opening of the container is achieved simply by depressing the inner tube 3 relative to the outer tube 1. This is a problem because many medicinal tablets are unsafe except when taken as prescribed, and consequently it is undesirable for small children to obtain unsupervised access to such

tablets. It is often the case that children obtaining access to such tablets ingest them, and this can lead to serious illness and on occasion death.

We have invented a new type of safety container for tablets which addresses this drawback and which makes it difficult for small children to access tablets within the container.

Our container is illustrated in Figures 3 and 4 on the attached page headed "OUR INVENTION". Figure 3 is a fragmentary perspective view of our safety container in a closed position, and Figure 4 is a fragmentary perspective view of our safety container in an open position.

Our safety container 10 includes an exterior member 11 and an interior member 21. The exterior member 11 includes an end wall 14 and a cylindrical side wall 12 which defines a circular side wall aperture 13. A first projection 15, forming the shape of a half disc, projects outwardly from the end wall 14, as shown.

The interior member 21 includes a cylindrical side wall 22 which defines a circular side wall aperture 23. The interior member 21 also includes an interior end wall 24 which is oppositely disposed to the exterior member end wall 14 to complete an enclosure for tablets. A second projection 25, forming the shape of a half disc, projects outwardly from the interior member end wall 24.

The cylindrical side walls 12 and 22 are concentric and are slidably engaged with each other (the inside diameter of the side wall 12 being slightly larger than the outside diameter of the side wall 22). Also, these cylindrical side walls are movable, one with respect to the other, in both a longitudinal and a transverse direction such that the two apertures 13 and 23 can be registered with each other. The sliding movement follows a path defined by a recessed slotted portion 16 disposed in the cylindrical side

wall 12. A boss 26 protrudes from the cylindrical side wall 22 and extends into the recessed slotted portion 16 to follow the path defined by this slotted portion. As the boss 26 moves through the path defined by the slotted portion 16, the aperture 23 is brought into alignment with the aperture 13 to allow tablets within the container to be dispensed. The recessed slotted portion 16 has a depth of about half of the wall thickness of the exterior member 12 so that the boss 26 is not exposed to the exterior of the container.

Preferably, the path defined by the slotted portion 16 has three longitudinal portions which are interspersed by two transverse portions. However, it is not necessary that the path has only longitudinal and transverse portions, nor is it necessary that the turns in the path are right angles. What is important is that the path requires a certain degree of complex movement between the exterior member 11 and the interior member 21 to register the two apertures 13 and 23, thereby to avoid easy access to tablets within the container by small children.

The projections 15 and 25 are used to grip the container and to slidingly move the interior member 21 with respect to the exterior member 11. The projections 15 and 25 also provide a means for preventing the container from being set down unless it is in a closed position. In this regard, when the container is in an open position (Figure 4), the projection 25 projects sufficiently far from a lip 17 that the container cannot be placed on a flat horizontal surface, resting upon the projection 25 and the lip 17, without the container tipping over. On the other hand, when the container is in a closed position (Figure 3), the projection 25 is fully contained within the recess defined by the exterior member side wall 12 so that the container may be set down on the lip 17 without tipping over.

The lip 17 is attached to the exterior member 11 and extends inwardly from

the exterior of the side wall 12 so that the interior member 21 is contained within the exterior member 11 by the lip 17 and the exterior member end wall 14.

Since the safety container must be closed before it can be set down without tipping over, the container is safeguarded against being accidentally left open. Further, since the opening of the safety container involves a relatively complex movement between the exterior member 11 and the interior member 21 to register the two apertures 13 and 23, it avoids easy access to tablets within the container by small children.

Please prepare a patent specification for our invention.”

PRIOR ART

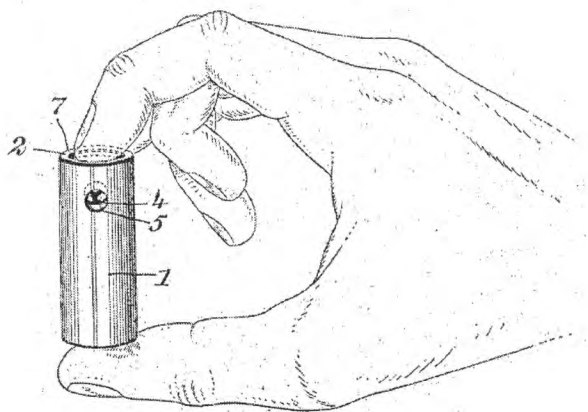


Fig. 1

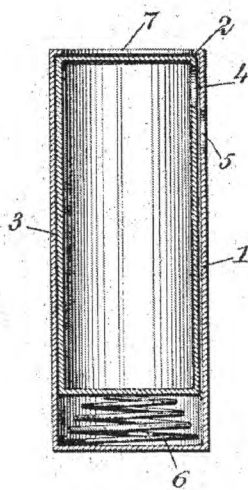


Fig. 2

OUR INVENTION

Fig. 3

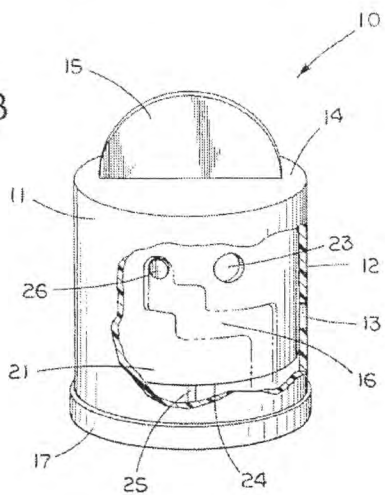


Fig. 4

