

DRAFTING OF PATENT SPECIFICATIONS: 2007

SUPPLEMENTARY EXAM

PAPER 1B

1. Your client writes:

“I wish to obtain a patent on a bottle cork pulling mechanism, a prototype of which is described below. You will be aware of the simple corkscrew which comprises a screw and a fixed cross lever to provide a turning moment as the screw bites into the cork.

Another prior art corkscrew is shown in figures 1, 2, and 3. A screw 9 which bites into the cork is formed at the lower end of a shaft 2. The upper part 7 of the shaft is also threaded. The shaft passes loosely through a bore 13 in a top part of a spacer 3 which, in use, is placed over the bottle 14 top. A cross lever 5 has an internally threaded bore which receives the upper threaded part of the shaft. At the start of the operation of the cork pulling mechanism, the cross lever is at the very top of the shaft and the shaft and the cross lever are locked in that position by a cam member 8 shaped as shown. The cam member is rotatable about the cross lever (which is circular in cross section) from the lower position shown in figures 1 and 2 to a cam upper position shown in figure 3, in which a hole 10 through the cam member is registered with the bore through the cross lever. In

this cam upper position, the cross lever can be screwed along the upper threaded part of the shaft.

In use, from the position shown in figure 1, the corkscrew is driven into the cork 11 by rotating the cross lever 5. As the shaft moves down through the spacer, the cam member strikes the upper part of the spacer and subsequently rotates about the cross lever to the cam upper position. On further turning the lever (figure 3), instead of the lower screw 9 biting further into the cork 11, the lever rotates on the upper screw so as to draw the shaft up through the spacer and to draw the cork from the bottle into the spacer.

Figure 4 shows my invention.

The corkscrew 100 has a hollow elongate body 120 with a shaft 130 supported therein.

A lower end of the shaft has a screw 140 for biting and screwing into a cork 150.

The upper middle end of the shaft is round in cross-section and has a series of parallel circumferential grooves 160 for co-operating with pinion formations 170 at inner ends of two levers 180. Each lever is pivotably connected at its inner end to the body so that when the shaft is moved up and down in the body, the

outer ends of the levers move down and up, as a result of the action of the pinion 170 formations on the grooves 160.

In use, the lower end of the body is placed over a bottle top 190. A handle 200 at the upper end of the shaft is rotated and pushed down so that the screw 140 bites into the cork 150.

As the shaft is drawn into the cork the levers 180 are forced upwards. When the levers reach an uppermost position (as shown in figure 4), one can let go of the handle and then, using two hands, force the levers downward to extract the cork from the bottle.

2. Identify the inventive feature(s) of the invention and draft a claim to protect the invention.

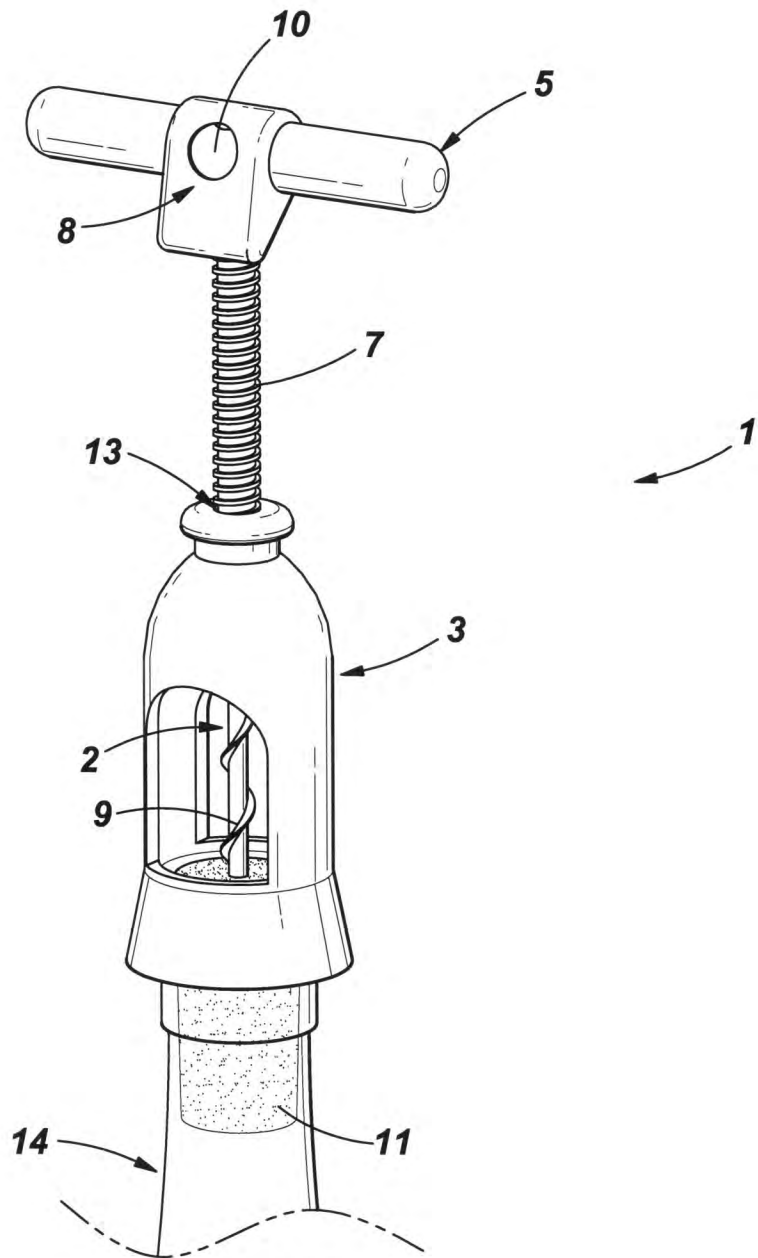


FIGURE 1

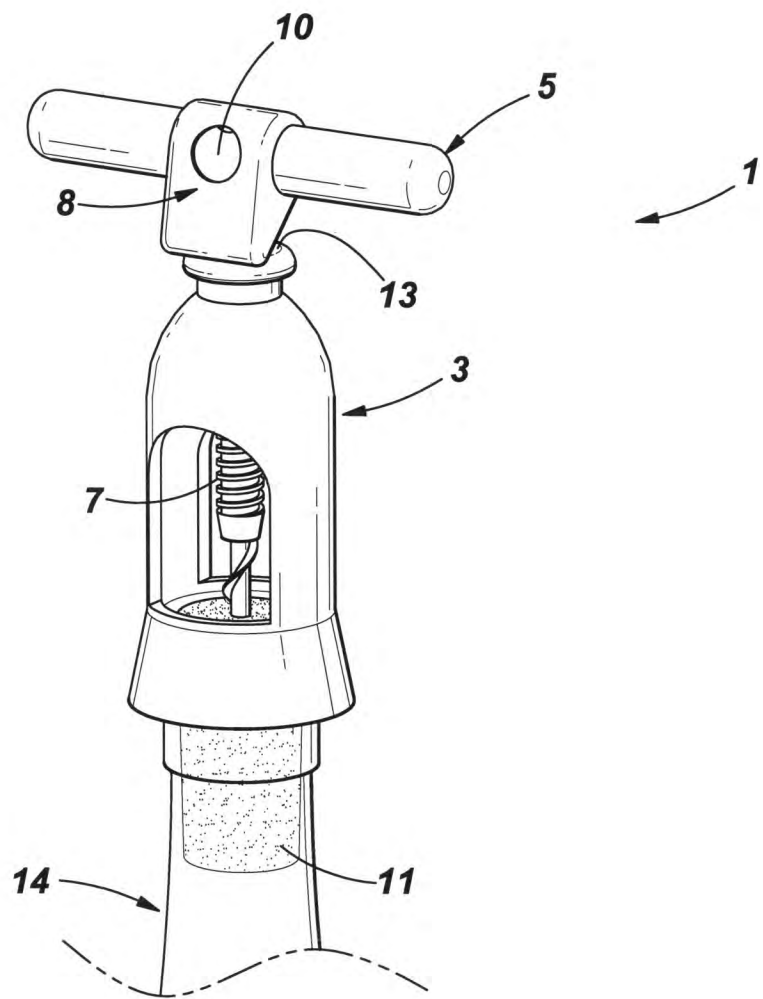


FIGURE 2

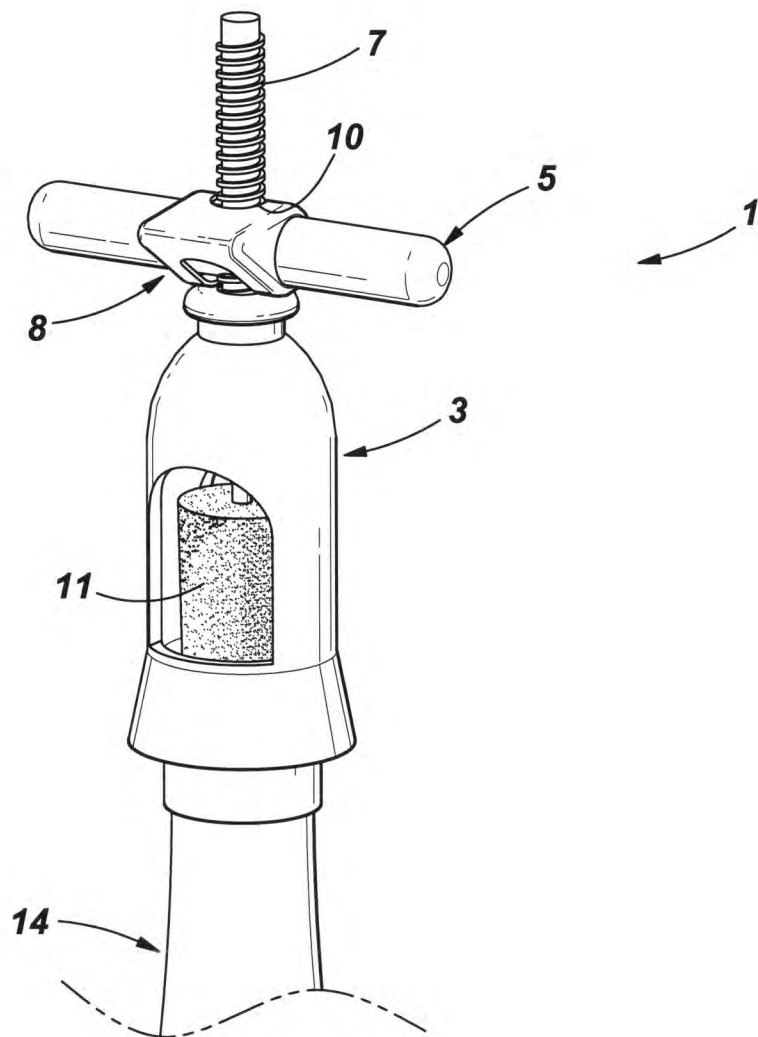


FIGURE 3

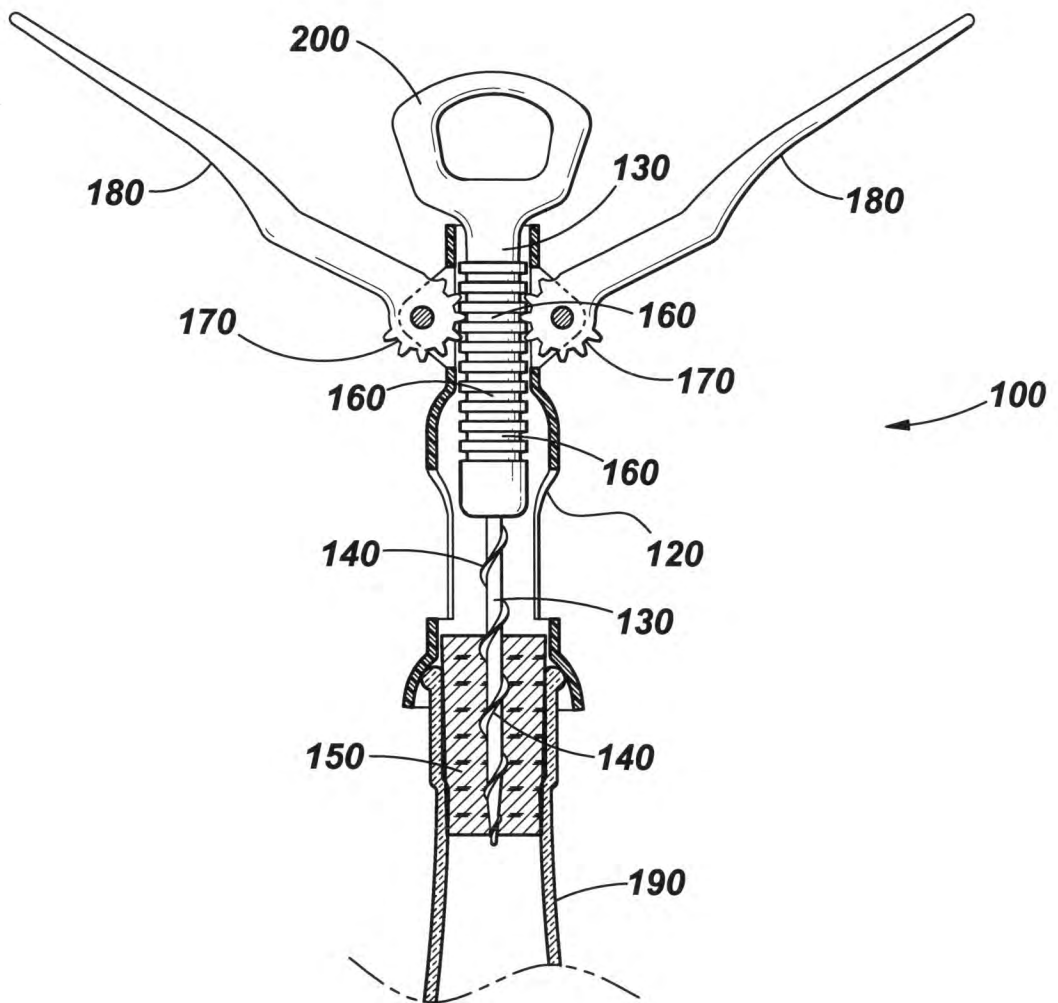


FIGURE 4: INVENTION