

VACUUM FLASK

The present invention relates to a vacuum flask.

5 It is an object of the present invention to provide a vacuum flask capable of separately containing two kinds of liquids, such as cool and hot water, or coffee and tea, for example.

10 Another object of the present invention is to provide a vacuum flask which can be stably positioned when laid on a flat surface.

Still another object of the present invention is to provide a vacuum flask of rugged construction which is protected against damage when it hits or falls onto a hard object.

15 A still further object of the present invention is to provide a vacuum flask of high portability.

According to the present invention there is provided a vacuum flask for containing different kinds of liquids, such as cool and hot water or coffee and tea at different
20 temperatures, comprising a heat insulating body composed of an outer barrel having an end neck on each end thereof and a pair of containers housed coaxially in said outer barrel each having a neck opening outwardly, an end neck of the outer barrel being sealingly fitted over the neck of each container,
25 said outer barrel and said containers therein jointly defining a space in which a vacuum is developed;

a plug removably fitted in the neck of each container;

an outer cover removably fitted over each end of said barrel in covering relation to each end plug;

30 a pair of rings fitted over said outer barrel adjacent to opposite ends thereof, each ring having a flat surface portion formed in the circumferential surface of the ring; and

a handle interconnecting said rings.

35 The above and other objects, features and advantages of the present invention will become more apparent from the following description when taken in conjunction with the accompanying drawings in which a preferred embodiment

(B)

- 2 -

of the present invention is shown by way of illustrative example.

Figure 1 is a perspective view of a vacuum flask according to the present invention;

5 Figure 2 is a front elevational view, partly broken away, of the vacuum flask; and

Figure 3 is a transverse cross-sectional view of the vacuum flask.

As shown in Figures 1 to 3, a vacuum flask comprises
10 an outer barrel 1 of stainless steel housing therein a pair of containers 2, 2 (Figure 2) of stainless steel spaced from each other in coaxial relation and having necks 2a opening outwardly. The outer barrel 1 and the containers 2, 2 jointly define a space 3 therebetween
15 and also between the containers 2, 2. The outer barrel 1 has an end neck 1a sealingly fitted over the neck 2a of each container 2. The barrel 1 with the containers 2, 2 sealingly accommodated therein serves as a heat insulating body a with a vacuum being developed in the
20 space 3.

The heat insulating body a has a pair of opposite openings 4 each of which receives a removable plug 5. A pair of outer covers 6 are removably fitted over the opposite ends of the heat insulating body a in covering
25 relation to the plugs 5. A pair of rings 8 is fitted over the heat insulating body a adjacent to the opposite ends thereof. The rings 8 have lower bases 7, respectively, and are interconnected by a handle 9 which is diametrically opposed to the bases 7. Each of the rings
30 8 is made of plastics material and has abutting flanges 8a fastened together by a screw, as shown in Figures 1 and 3. As illustrated in Figures 1 and 2, a shoulder strap 10 is attached to one of the rings 8.

The containers 2 in the heat insulating body a are

35

thermally independent from each other, so that they can contain different kinds of liquids at different temperatures, such as, for example, cool and hot water, or coffee and tea. Therefore, the vacuum flask of the present invention is more convenient to use than a normal vacuum flask which can contain only one kind of liquid. The liquids can easily be stored or discharged simply by removing the outer covers 6 and the plugs 5. Since all of the components of the heat insulating body a are made of stainless steel, it is resistant to corrosion, rugged, and durable as regards protection against damage even when it hits or falls onto a harder object. The bases 7 of the rings 8 allow the heat insulating body a to be stably positioned on a flat surface such as a table top or ground surface and the vacuum flask can conveniently be carried around by holding the handle 9.

Although a preferred embodiment has been shown and described, it should be understood that many changes and modifications may be made therein without departing from the scope of the appended claims.

15

- 4 -



CLAIMS

1. A vacuum flask comprising;

5 (a) a heat insulating body composed of an outer barrel having an end neck on each end thereof and a pair of containers housed coaxially in said outer barrel each having a neck opening outwardly, an end neck of the outer barrel being sealingly fitted over the neck of each container, said outer barrel and said containers therein jointly
10 defining a space in which a vacuum is developed;

(b) a plug removably fitted in the neck of each container;

(c) an outer cover removably fitted over each end of said outer barrel in covering relation to each end plug;

15 (d) a pair of rings fitted over said outer barrel adjacent to opposite ends thereof, each ring having a flat surface portion formed in the circumferential surface of the ring; and

(e) a handle interconnectong said rings.

20 2. A vacuum flask according to claim 1 in which the outer barrel and pair of containers are made of stainless steel.

25 3. A vacuum flask according to claim 1 or claim 2 in which each of said rings has end flanges fastened to each other by a screw.

30 4. A vacuum flask according to any of claims 1, 2 and 3 in which the handle is located in diametrically opposite relation to the bases of said rings.

5. A vacuum flask according to any preceding claim, including a shoulder strap connected to one of said rings.

35 6. A vacuum flask substantially as hereinbefore described and with reference to the accompanying drawings.
