

MEMORANDUM

Date: March 30, 1984

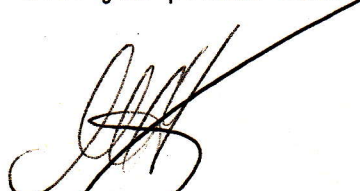
To: C. D. Read Dept. 2Z21 Carling

From: S. T. Jelly Dept. 267 Meriline

Subject: Draft Patent Application  
Our Ref.: RO-1939  
TELEPHONE SET

Enclosed is a copy of the draft specification for this case.

Will you please consider this and let me have your comments.



Sidney T. Jelly,  
Group Patent Manager.

STJ/sc  
Encls.

Draft Patent - READ - R0-1939 - March 29, 1984 - TELEPHONE SET

This invention relates to a telephone set and particularly to the arrangement of top and bottom housings of a base, and of a handset.

Conventionally, telephone set bases have top and bottom housings, which are connected or joined together peripherally. Usually the opposed edges of the top and bottom housings are formed with interengaging formations which overlap on assembly of the two housings together. Similarly, handsets also have two housings joined peripherally.

Of necessity, a joint line will show. Even with great care, manufacturing tolerances, particularly molding tolerances, will prevent obtaining a joint so fine that it cannot be seen. Molding shrinkage can also occur and affect the final assembly.

The present invention provides for the provision of a thin spacer member between the opposed edges of the housing. Quite close fits can be obtained between each housing and the spacer. If desired formations on the opposed edges of the housings can be caused to engage with formations on the spacer but good fits with close joints can still be obtained.

The invention will be readily understood by the following description of a particular embodiment by way of example in conjunction with the accompanying drawings, in which:-

Figure 1 is an exploded perspective view of one form of telephone set base;

Figure 2 is a cross-section on the line II-II of Figure 1, illustrating a modification, to an enlarged scale;

PROPRIETARY INFORMATION  
PATENT DEPARTMENT CLEARANCE REQUIRED  
BEFORE EXTERNAL DISCLOSURE

Figure 3 illustrates a handset;

Figure 4 is an exploded perspective view of another form of telephone set base; and

Figure 5 is an exploded perspective view of yet another form of telephone set base.

As illustrated in Figure 1, telephone set base comprises a bottom housing 10, a top housing 11 and a spacer 12. The top housing has the usual recesses 13 and 14 for reception of the transmitter and receiver cups of a handset. A dial is generally provided, as desired, but not shown in Figure 1.

The bottom housing normally provides space for the conventional electrical and electronic components. The walls 15 of the bottom housing 10, in the example, have a flat top surface 16. The walls 17 of the top housing 12 have a flat bottom surface, not seen. The spacer 12 is relatively thin, being in the form of a peripherally extending web. Holes 18 are provided, which align with holes 19 in the bottom housing, and similar holes in the top housing. Screws can be fed up through the holes 19, through holes 18 and screwed into the holes in the top housing. Localized increases in thickness of the walls, as at 20, in both top and bottom housings provide for the holes 19 and the similar holes in the top housing.

When the top and bottom housings are assembled the spacer 12 is positioned between the top and bottom surfaces of the walls 15 and 17 respectively, with the outer edge 21 of the spacer showing. The spacer can be of relatively rigid material or of flexible, resilient or deformable material. With resilient or deformable material, any slight variations in the surfaces of the walls 15 and 17 will be accommodated and will not show.

Instead of the surfaces of the walls being flat, they can be given formations which interengage with the spacer. An example is illustrated in Figure 2. In the example a narrow rib 25 is formed in the top surface 16 of the walls 15 of the bottom housing 10. A recess 26 is formed in the bottom surface 27 of the spacer 12 and a narrow rib 28 is formed on the top surface 29 of the spacer. A recess 30 is formed in the bottom surface 31 of the walls 17 of the top housing 11. The shape of the ribs and recesses can vary. By making the recesses slightly larger than the ribs, complete mating of surfaces 16 and 27 and surfaces 29 and 31 can be obtained. Both ribs can be on the spacer, or, if the spacer is thick enough, both recesses can be in the spacer. If the spacer 12 is deformable, any slight misalignment between ribs and recesses will be adjusted to.

The provision of the spacer avoids the need to try and obtain close manufacturing tolerances. Unattractive gaps between housing walls are avoided and the spacer can be made as a distinctive feature.

The actual design or form of the telephone set base can vary. Figure 1 only illustrates one particular shape as an example. In some examples, the joint line may not be readily visible all round the set depending upon the design, although top and bottom housings are still provided.

The invention can also be applied to telephone handsets. Figure 3 illustrates a handset embodying the invention. The two housings are indicated at 40 and 41 and the spacer is indicated at 42. The edges of the housings and the spacer are more likely to have interengaging formations as housings are usually held together by screws, or other means, not positioned at the periphery.

Figures 4 and 5 illustrate two alternate forms of base. In Figure 4 the base is for a telephone set which is normally positioned with its longitudinal axis at 90° to the longitudinal axis of the base of Figure 1. In Figure 4 the same reference numerals are used for similar parts. In Figure 4 the recess 23 extends right through the top housing 11 into the bottom housing 10. The spacer 12 may or may not appear between the two housings around the recess 13.

Figure 5 illustrates a further form of base in which a separate insert or chassis 45 is provided. The edge 46 of this insert or chassis 45 shows at the joint line between top and bottom housings 11 and 10. The bottom housing can be attached in two alternate directions, for alternate desk and wall mounting. The insert or chassis carries the conventional electrical and electronic components, instead of them being mounted on the bottom housing.

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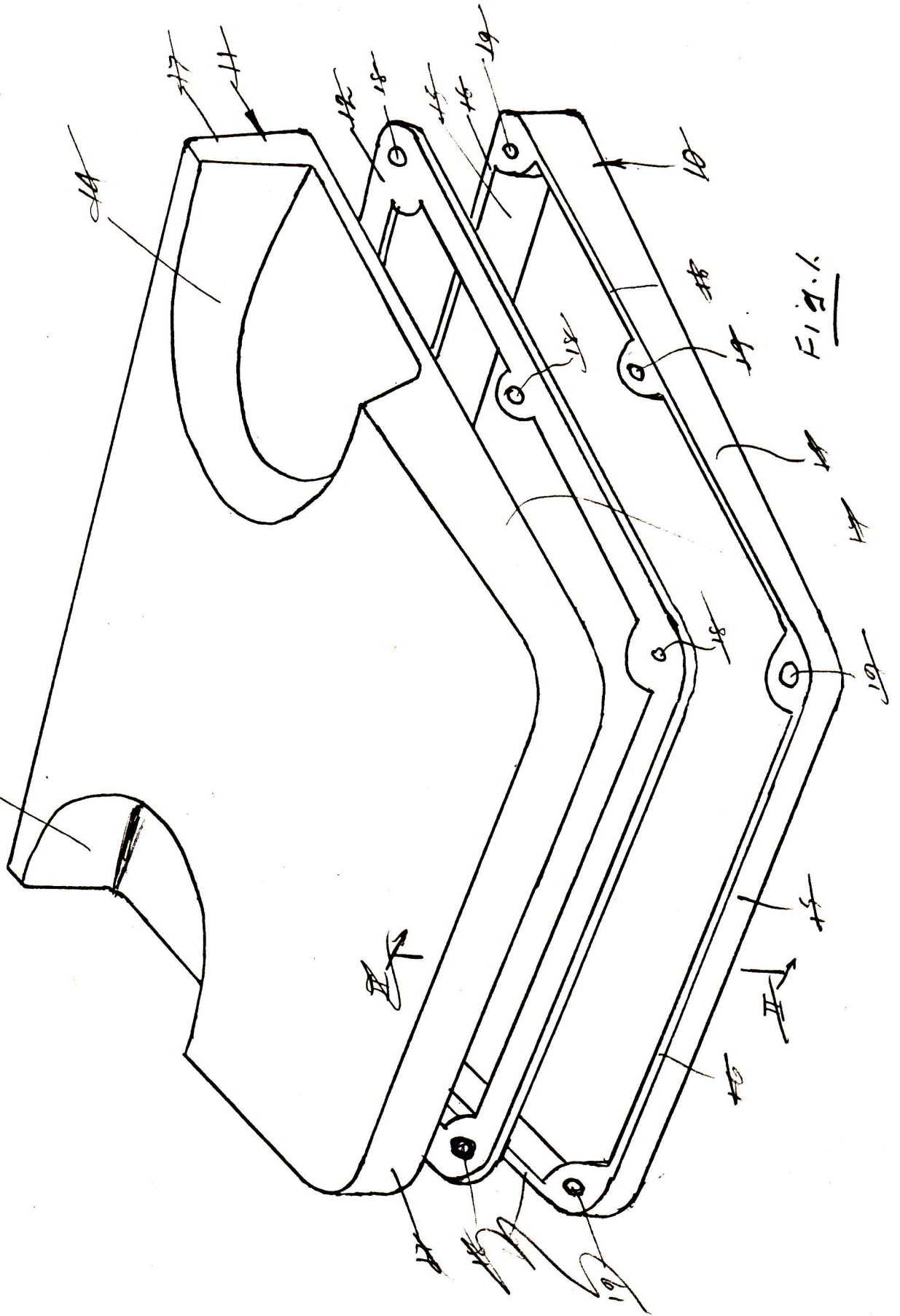


Fig. 1

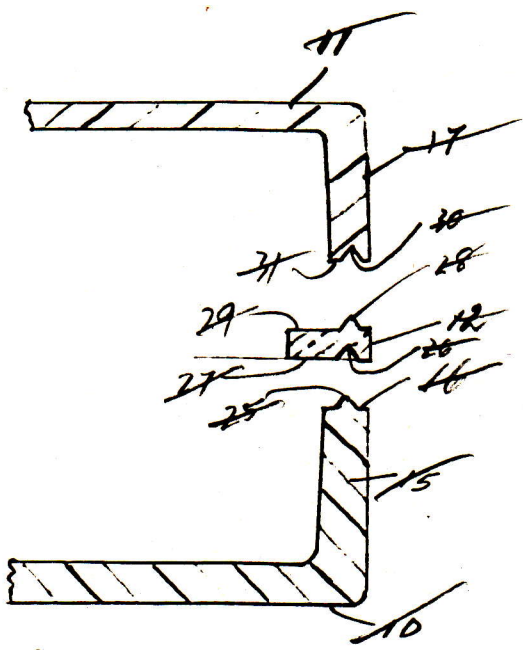


FIG. 2

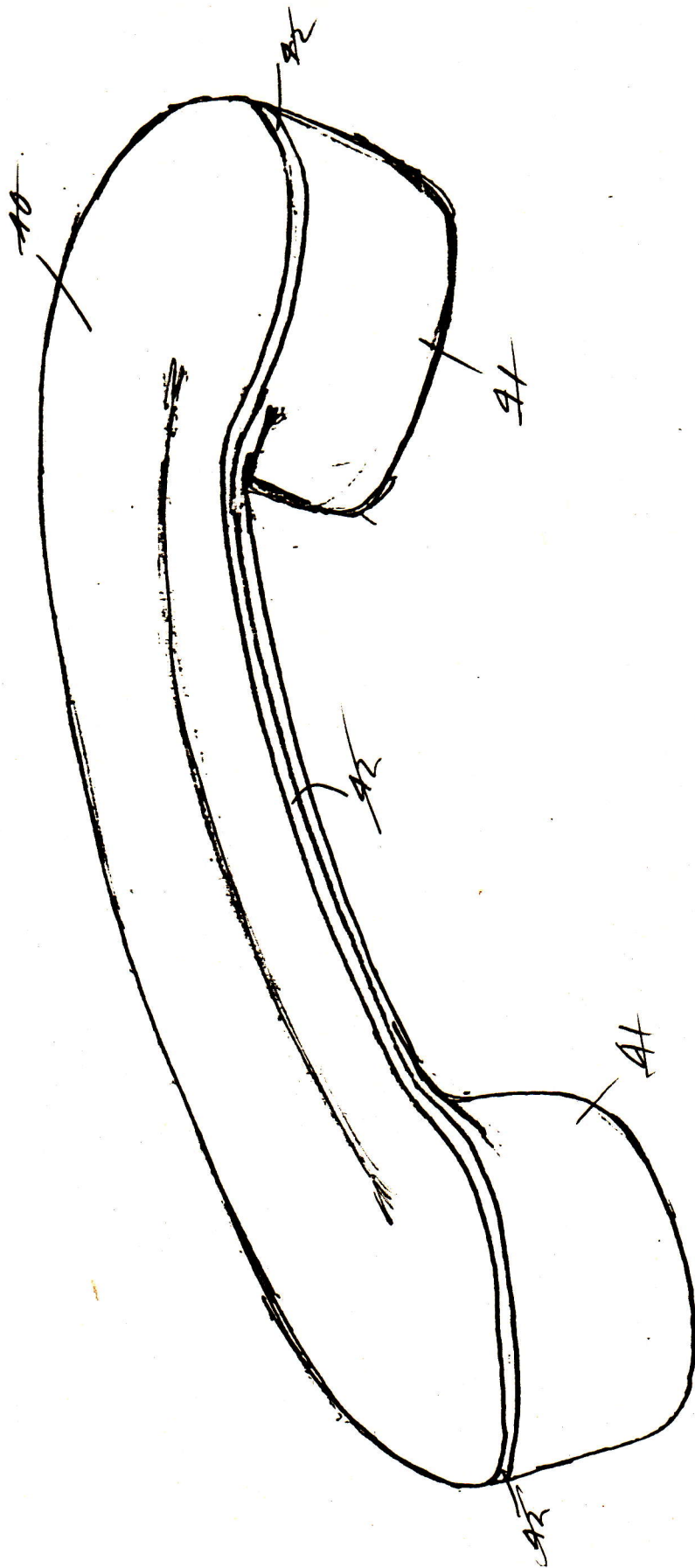
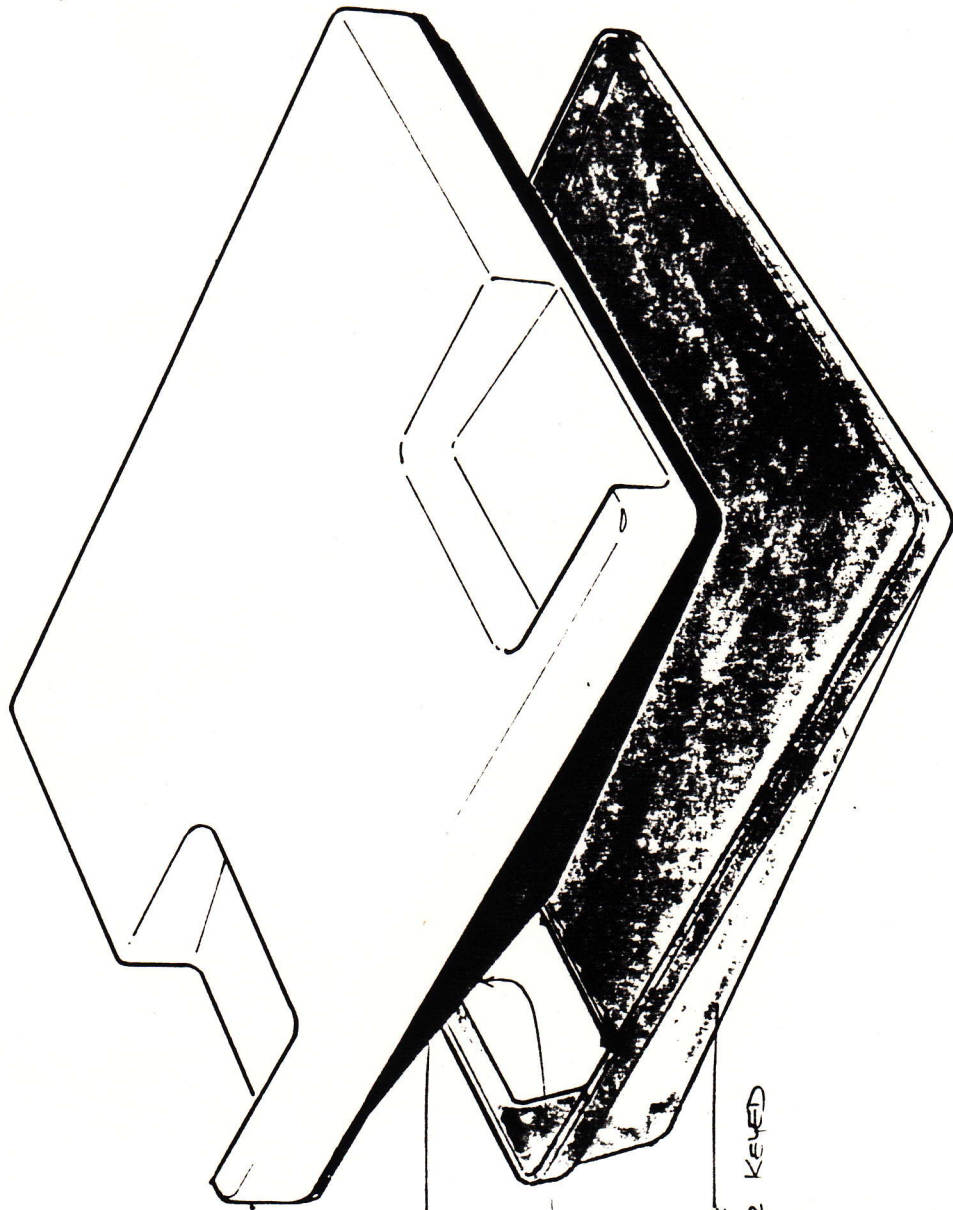


Fig. 3.

Fig 4  
explosion  
explosion  
no

(contact  
product)





CHASSIS  
DOUBLES AS  
TRIM DETAIL.

GRIPPING  
DETAIL MOULDED  
ONTO CHASSIS.

ROTATABLE BASE  
CAN BE COLOUR KEYED  
TO TOP HOUSING.

Fig 5