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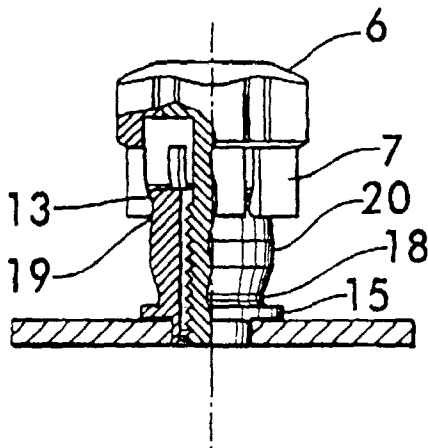
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(54) Title: HYBRID PANEL FASTENER WITH SNAP-ON CAP



(57) Abstract: A two-piece panel fastener includes a barrel-shaped metal re-
tainer (10) which holds a screw. The screw includes a threaded shaft and a
plastic cap (6) which has longitudinally-extending resilient fingers (7) which
engage the outer surface of the retainer to captivate the screw. The retainer
has a chamfered top flange (13) along its top edge, a circumferential bulge
area (16) around its outer surface approximately in the middle of its length,
and a base (15) at its bottom. Two circumferential valley regions of reduced
diameter are located along the outer surface of the retainer. The first valley
region is located between the chamfered top flange and the bulge area and
the second is located between the bulge area and the base. When the fingers
occupy either of the valley regions, the screw is captively held at either of two
stable positions of retraction or extension. The retainer is preferably rigidly
affixed to a circuit board (5) by soldering a base flange at the bottom of the
retainer to the top surface of the board.



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