

ABSTRACT

A probe head (20) is described comprising a plurality of contact probes (21A, 21B, 21C) being housed in respective pluralities of guide holes (25A, 27A, 29A, 36A; 25B, 27B, 29B, 36B; 28C, 29C, 36C) being realized in a plate-shaped support (22), the plurality of contact probes (21A, 21B, 21C) sliding within said pluralities of guide holes (25A, 27A, 29A, 36A; 25B, 27B, 29B, 36B; 28C, 29C, 36C) on occasion of their movement during testing operations performed by means of said probe head (20) and comprising at least a first group of contact probes (21A, 21B) being apt to carry only one type of signal chosen between ground and power supply signals (GND, PWR). The probe head (20) comprises at least one filtering capacitor (30) and at least a first and a second conductive portion (22A, 27A; 22B, 26A) realized on the plate-shaped support (22) and including a plurality of the guide holes (25A, 29A; 25B, 28B) housing the contact probes (21A, 21B) of the first group, the conductive portion (22A, 27A; 22B, 26A) electrically connecting the contact probes (21A, 21B) of the first group, Suitably, the plate-shaped support (22) comprises at least a seat (33) housing the filtering capacitor (30), the first and second conductive portions (22A, 22B) extending also in correspondence of the capacitor housing seat (33) to realize a connection with the filtering capacitor (30) having a first capacitor plate (31) connected to the first conductive portion (22A) and a second capacitor plate (32) connected to the second conductive portion (22B), the first and second conductive portions (22A, 22B) being apt to be connected to respective distinct voltage references, chosen between a power supply reference and a ground reference (PWR, GND) and the plate-shaped support (22) is a lower support of a pair of supports housing the contact probes (21A, 21B, 21C), lower meaning closer to a device under test (23) integrated on a wafer, the filtering capacitor (30) being in this way positioned in proximity of contact tips of the contact probes (21A, 21B, 21C) adapted to abut onto contact pads (23A, 23B) of the device under test (23).

(Fig. 2C)