



ABSTRACT OF THE DISCLOSURE

BOARD RACK AND MANUFACTURING METHOD THEREFOR

A board rack applicable to environmental testing of circuit boards overcomes problems of inaccurate and cumbersome assembly method based on welded joints. Dimensionally precise, light weight rack is produced with simple processes of press punching and forming of a main frame pattern involving a minimum of welding steps. The hollow vertical support columns are made by folding peripheral sections provided on a main frame pattern, consisting of a bottom section in the middle joined to a back section and a front section, in a single sheet of material. The main frame component is produced by folding four vertical support members and front and back horizontal support members from the peripheries of the three sections. After uprighting the front and back sections on the bottom section, a subframe component similarly produced by folding the peripheries of a subframe pattern is attached to the ceiling section of the rack. Guide rails extending from the front to the back sections are joined to short teeth extending from the left and right columns towards the interior of the rack. The present rack is advantageous because it is produced as a uniframe structure from a sheet material involving less welding joints so that the process of assembling the rack is efficient and cost effective.