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(54) Title: PLATEN FOR USE WITH A THERMAL ATTACH AND DETACH SYSTEM WHICH HOLDS COMPONENTS BY VACUUM SUCTION

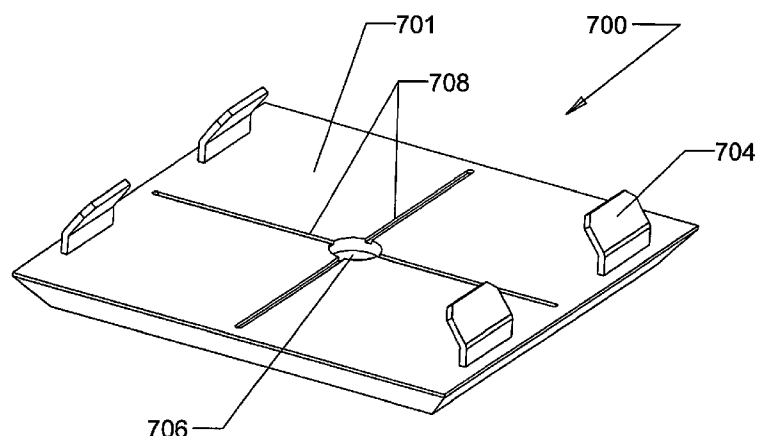


FIG. 30

(57) Abstract: The present platen (700) enables a component such as a surface-mount device (714) to be held in close proximity to a contact heating source via vacuum suction. The platen comprises top (701) and bottom (702) thermally conductive surfaces with the top surface held in close proximity to the contact heating source (722), a through-hole (706) which extends between the surfaces, and at least one groove (708) recessed into the top surface which runs from a portion of the top surface that extends beyond the contact heating source to the through-hole, such that an applied vacuum is conveyed to the bottom surface via the grooves and through-hole. The bottom surface may include a rim (710) around its perimeter; vacuum suction conveyed via the grooves and through-hole can hold a component to be heated against the rim, or within the recessed portion. The platen can be tailored for use with various component types, including PBGA and QFP SMDs.



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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
H05K B23K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
X	JP 2005 347621 A (MATSUSHITA ELECTRIC IND CO LTD) 15 December 2005 (2005-12-15) abstract; figures 2,3	1-15
A	-----	16-20
A	US 2006/131360 A1 (DURSTON THOMAS W [US] ET AL) 22 June 2006 (2006-06-22) paragraph [0074] - paragraph [0076] paragraph [0081] figure 14	1-20
A	-----	1-20
A	US 2006/124705 A1 (KUCZYNSKI JOSEPH [US] ET AL) 15 June 2006 (2006-06-15) paragraph [0020]; figure 1 paragraph [0021]; figure 2	1-20
A	-----	1-20
A	JP 2002 134906 A (MATSUSHITA ELECTRIC IND CO LTD) 10 May 2002 (2002-05-10) abstract	1-20

D

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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