



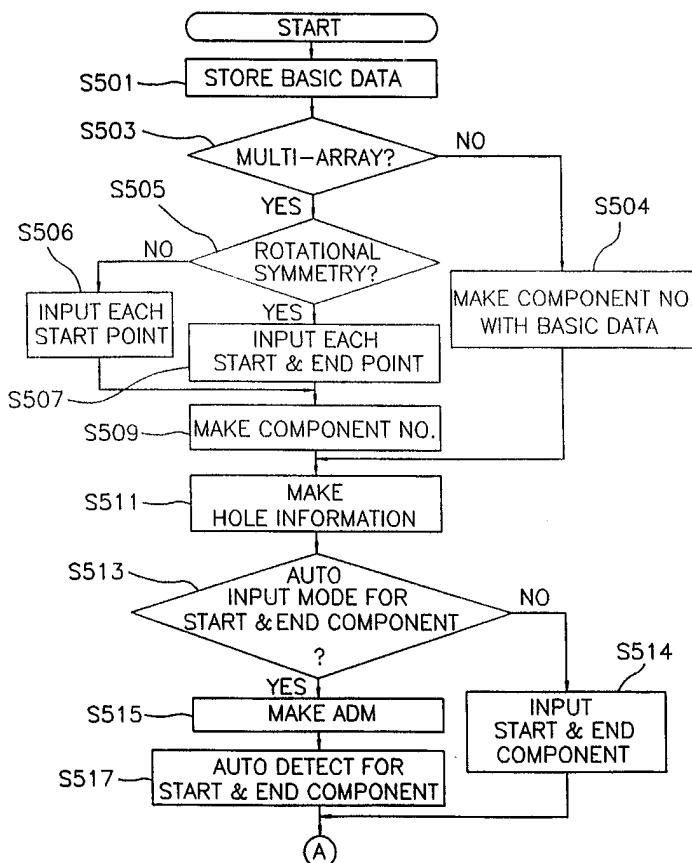
INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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(21) International Application Number: PCT/KR97/00236 (22) International Filing Date: 26 November 1997 (26.11.97) (30) Priority Data: 1996/58067 27 November 1996 (27.11.96) KR (71) Applicant: DAEWOO ELECTRONICS CO., LTD. [KR/KR]; 541, 5-Ga, Namdaemoon-ro, Jung-ku, Seoul 100-095 (KR). (72) Inventor: YOON, Yong-Ki; 102/1103, Whaseongmyongsan Town, Jimyo-dong, Dong-ku, Taegu 701-480 (KR). (74) Agent: NAM, Sang-Sun; Daekyung Building, 17th floor, 120, Taepyeongno 2-ga, Chung-ku, Seoul 100-102 (KR).		(81) Designated States: CN, ID, JP, SG, VN, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i> (88) Date of publication of the international search report: 8 October 1998 (08.10.98)

(54) Title: APPARATUS FOR PRODUCING AN AUTOMATIC INSERTING PATH OF A MULTI-ARRAY PCB AND A METHOD THEREFOR

(57) Abstract

In a method for producing an automatic inserting path of a multi-array PCB, CAD data and components data are stored (S501). After judging (S503) whether a PCB is the multi-array PCB or not, whether the multi-array PCB is rotatably symmetric (S505) or not is determined when being determined as the multi-array PCB. In case of the rotatably symmetrical, multi-array PCB (S505), respective start points and end points (S507) are received to be stored, and a reference PCB is selected. Item numbers of components are produced with respect to the reference PCB, and hole information for the components is generated. Start component and end component (S513) are determined for the automatic insertion. The automatic inserting path is produced via the nearest neighbor path algorithm. In case of a production mode for mass production, the automatic inserting path is produced again. By doing so, the automatic inserting path can be efficiently produced.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/KR 97/00236

A. CLASSIFICATION OF SUBJECT MATTER

IPC⁶: H 05 K 13/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC⁶: H 05 K 13/00, 3/00; G 06 F 15/00; H 03 K 17/00

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 practicable, 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 A	US 5 363 313 A (LEE) 08 November 1994 (08.11.94), fig.; abstract; columns 1-13.	1-3,6 4,5,7
A	US 4 852 015 A (DOYLE) 25 July 1989 (25.07.89), fig.; abstract; columns 1-8.	1-7
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☐ Further documents are listed in the continuation of Box C. ☒ See patent family annex.

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Date of the actual completion of the international search	Date of mailing of the international search report
30 April 1998 (30.04.98)	16 July 1998 (16.07.98)

Name and mailing address of the ISA/ Austrian Patent Office Kohlmarkt 8-10; A-1014 Vienna Facsimile No. 1/53424/535	Authorized officer Kral Telephone No. 1/53424/458
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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/KR 97/00236

Im Recherchenbericht angeführtes Patentdokument Patent document cited in search report Document de brevet cité dans le rapport de recherche	Datum der Veröffentlichung Publication date Date de publication	Mitglied(er) der Patentfamilie Patent family member(s) Membre(s) de la famille de brevets	Datum der Veröffentlichung Publication date Date de publication
US A 5363313	08-11-94	keine - none - rien	
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