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Declarations under Rule 4.17:

— *of inventorship (Rule 4.17(iv))*

[Continued on next page]

(54) **Title**: CONNECTION QUALITY VERIFICATION FOR INTEGRATED CIRCUIT TEST

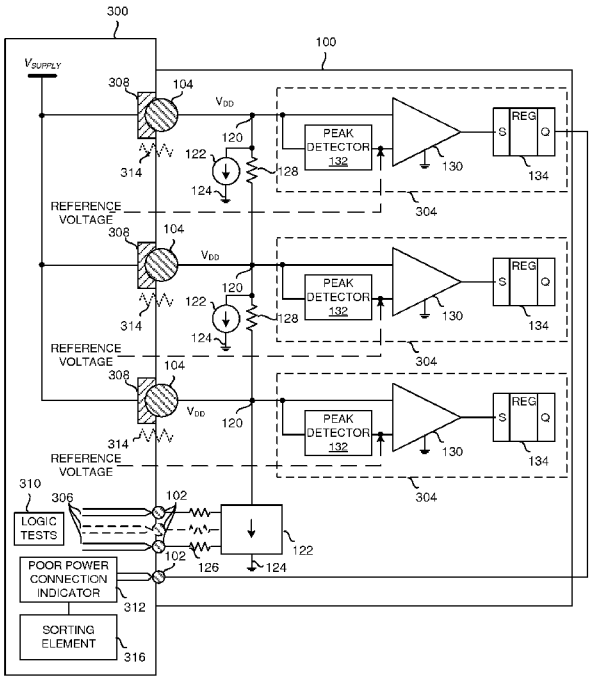

Fig. 3

(57) **Abstract**: An integrated circuit device 100 comprising a semiconductor die contained in a package. The integrated circuit device includes one or more internal connection verification modules 304 for asserting a poor connection signal for the test apparatus in response to a voltage difference between a voltage at a corresponding internal power supply node 120 and a reference voltage, the voltage difference being indicative of a poor connection of power supply to one of power supply terminals 104 on the package. The test apparatus 300, 400 can include an indicator 312 or a sorting element 316 for rejecting or accepting the integrated circuit device 100 in response to logic signals indicative of the presence or absence of a defect accompanied by non-assertion of the poor connection signal, and for processing the integrated circuit device 100 distinctively in response to assertion of the poor connection signal.

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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)

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

Korean utility models and applications for utility models
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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: power, supply, connection, verification, reference

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	KR 10-2005-0014137 A (SAMSUNG ELECTRONICS CO., LTD.) 07 February 2005 see page 2, line 27 - page 4, line 53 and figures 1-3.	1-14
A	JP 2008-076356 A (FUJITSU LTD.) 03 April 2008 see paragraph [0005] - [0012]; claims 1-10 and figures 1-5.	1-14
A	US 2006-0217906 A1 (BARBARA, B. J. et al.) 28 September 2006 see paragraph [0017] - [0025] and figures 1-3.	1-14
A	US 05498972A A (HAULIN, TORD) 12 March 1996 see column 3, line 42 - column 6, line 5 and figures 1-5.	1-14

☐ 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
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Information on patent family members

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