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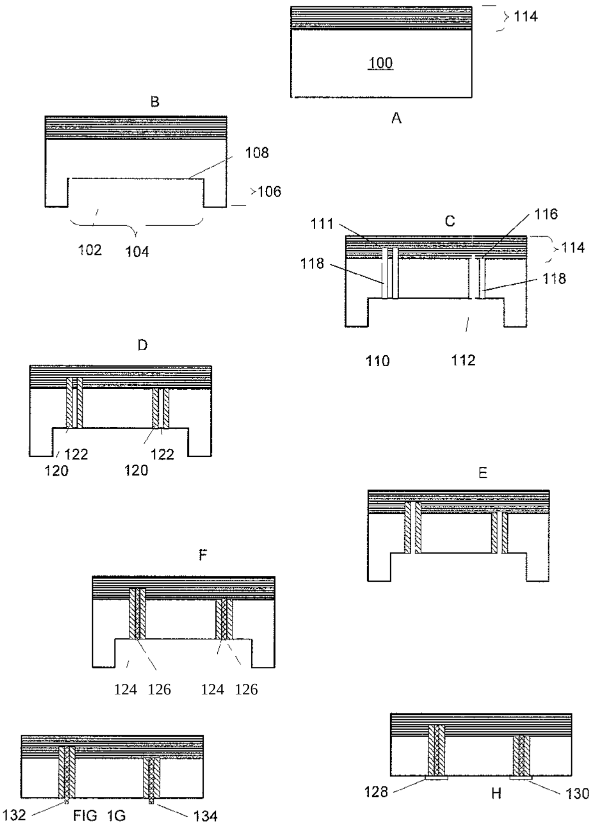
[Continued on next page]

(54) Title: WAFER VIA FORMATION



(57) Abstract: A method of electrically conductive via formation in a fully processed wafer involves defining at least one trench area on a backside of the fully processed wafer, forming at least one trench within the trench area to an overall depth that will allow for a via formed within the trench to be seeded over its full length, forming the via within the trench into the fully processed wafer to a predetermined depth, depositing a seed layer over the full length of the via, and plating the seed layer to fill the via with an electrically conductive metal.

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USPC - 257/98

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)
USPC - 257/98

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
USPC - 257/98,750,E21 211, $, 438/26, $
Search Terms Below

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
PubWEST (USPT, PGPB, EPAB, JPAB), google com

Search Terms Used via, formation, trench backside, seed, wet, dry, chip, trench area, sawing, dicing, periphery, peripheral, aligned

C DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
X -- Y	US 6,790,775 B2 (Fartash) 14 September 2004 (14 09 2004), entire document, especially Abstract, col 1, ln 45-46, col 3, ln 45-47, col 6, ln 50-55, col 7, ln 11-31	1-4, 8-12, 15, 19, 20 -------------------------- 5-7, 13, 14, 16-18
Y	US 5,075,253 A (Sliwa, Jr) 24 December 1991 (24 12 1991), entire document, especially Abstract, col 25, ln 60-62	7
Y	US 6,498,387 B1 (Yang) 24 December 2002 (24 12 2002), entire document, especially Abstract, col 2, ln 48-50	13, 14, 17, 18
Y	US 6,887,792 B2 (Perlov et al) 03 May 2005 (03 05 2005), entire document, especially Abstract, col 4, ln 3-7, FIG 4	5, 6
Y	US 6,013,551 A (Chen et al) 11 January 2000 (11 01 2000), entire document, especially Abstract, col 6, ln 48-52	16

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Name and mailing address of the ISA/US Mail Stop PCT, Attn ISA/US, Commissioner for Patents P O Box 1450, Alexandria, Virginia 22313-1450 Facsimile No 571-273-3201	Authorized officer Lee W Young **PCT Helpdesk. 571 272-4300** **PCT OSP 571 272 7774**