2004063376

29 OCT 2004

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
11 December 2003 (11.12.2003)

PCT

162162

(10) International Publication Number
WO 2003/103050 A3

(51) International Patent Classification[7]: H01L 27/108, 27/115

(21) International Application Number: PCT/EP2003/005809

(22) International Filing Date: 3 June 2003 (03.06.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10/161,907 4 June 2002 (04.06.2002) US

(71) Applicants: INFINEON TECHNOLOGIES AG [DE/DE]; St.-Martin-Str. 53, 81669 München (DE). KABUSHIKI KAISHA TOSHIBA [JP/JP]; 1-1, Shibaura 1-chome, Minato-ku, Tokyo, Tokyo 105-8001 (JP).

(72) Inventors: JACOB, Michael; 143 Mameguchidai, Naka-ku, Yokohama, Kanagawa 231-0838 (JP). REHM, Norbert; 28-6 Honmokuwada, Naka-ku, Yokohama, Kanagawa 231-0827 (JP). TAKASHIMA, Daisaburo; c/o Kabushiki Kaisha Toshiba, Intellectual Property Division, 1-1, Shibaura 1-chome, Minato-ku, Tokyo, Tokyo 105-8001 (JP). WOHLFAHRT, Jörg; 103, 225-14 Yamate-cho, Naka-ku, Yokohama, Kanagawa 231-0862 (JP).

(74) Agent: EPPING HERMANN FISCHER; Patentanwaltsgesellschaft mbH, Ridlerstrasse 55, 80339 Munich (DE).

(81) Designated States *(national)*: CN, JP, KR, SG.

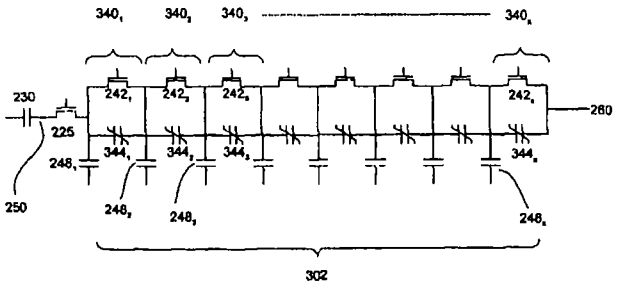
(84) Designated States *(regional)*: European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR).

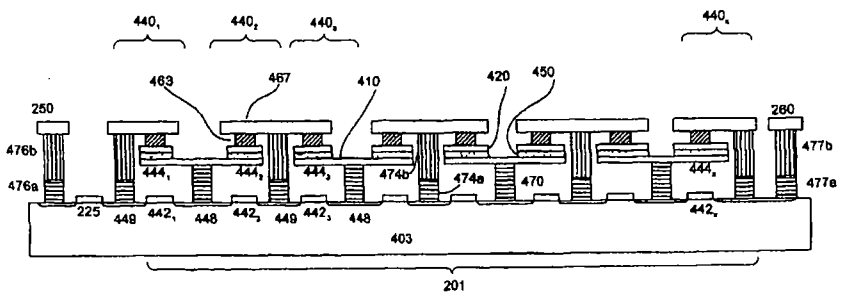
Published:
— *with international search report*
— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(88) Date of publication of the international search report:
11 March 2004

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: VARIABLE CAPACITANCES FOR MEMORY CELLS WITHIN A CELL GROUP





(57) Abstract: A memory chain with capacitors having different capacitances, depending on the location of the memory cell within the chain, is described. Varying the capacitances of the capacitors advantageously enables an effective capacitance for all memory cells within the chain to be about the same.

WO 2003/103050 A3

ACTION