

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

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
20 February 2003 (20.02.2003)

PCT

(10) International Publication Number
WO 03/015160 A3

(51) International Patent Classification⁷: **H01L 21/8238**,
27/092

(21) International Application Number: PCT/US02/25286

(22) International Filing Date: 9 August 2002 (09.08.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/311,88 9 August 2001 (09.08.2001) US

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(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW.

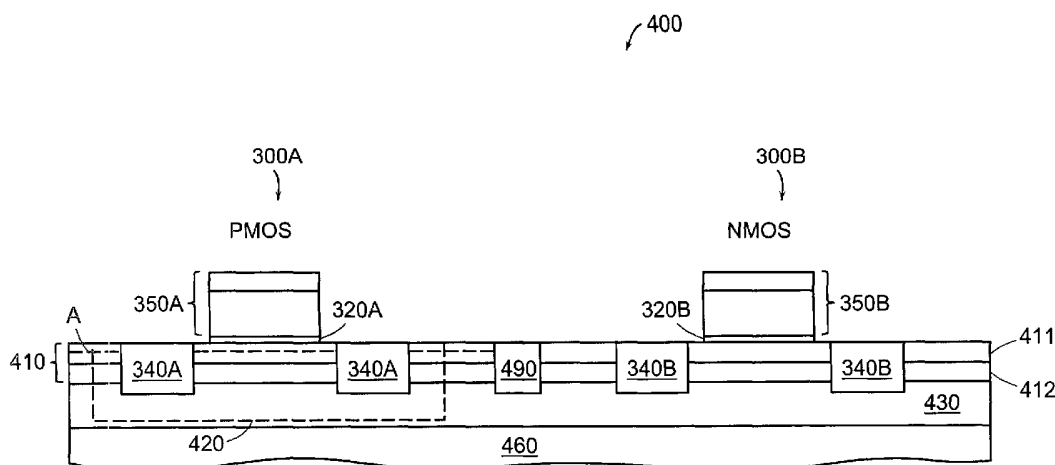
(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— with international search report

(88) Date of publication of the international search report:
4 December 2003

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: DUAL LAYER CMOS DEVICES



(57) **Abstract:** A semiconductor-based device includes a channel layer, which includes a distal layer and a proximal layer in contact with the distal layer. The distal layer supports at least a portion of hole conduction for at least one p-channel component, and the proximal layer supports at least a portion of electron conduction for at least one n-channel component. The proximal layer has a thickness that permits a hole wave function to effectively extend from the proximal layer into the distal layer to facilitate hole conduction by the distal layer. A method for fabricating a semiconductor-based device includes providing a distal portion of a channel layer and providing a proximal portion of the channel layer.

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 02/25286

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H01L21/8238 H01L27/092

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)

IPC 7 H01L

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)

EPO-Internal, WPI Data, PAJ, INSPEC, IBM-TDB

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	YEE-CHIA YEO ET AL: "Enhanced performance in sub-100 nm CMOSFETs using strained epitaxial silicon-germanium" 2000, PISCATAWAY, NJ, USA, IEEE, USA , 10 December 2000 (2000-12-10), pages 753-756, XP010531871 abstract; figure 3 ---	1-3,10, 20, 23-25, 28-30
X	EP 0 683 522 A (IBM) 22 November 1995 (1995-11-22) abstract; claims; figures 3,5 --- -/--	1-7, 10-15, 17-25, 28-30



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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Date of the actual completion of the international search

16 May 2003

Date of mailing of the international search report

23/05/2003

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INTERNATIONAL SEARCH REPORT

 Inter Application No
 PCT/US 02/25286

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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