(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 27 September 2001 (27.09.2001)

PCT

(10) International Publication Number WO 01/71721 A3

- (51) International Patent Classification7: G11C 11/4074
- (21) International Application Number: PCT/US01/08302
- (22) International Filing Date: 14 March 2001 (14.03.2001)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:

09/534,103 23 March 2000 (23.03.2000) US

- (71) Applicant: INFINEON TECHNOLOGIES NORTH AMERICA CORP. [US/US]; 1730 North First Street, San Jose, CA 95112-4508 (US).
- (72) Inventor: WEINFURTNER, Oliver; 35 Roberts Road, Wappingers Falls, NY 12590 (US).

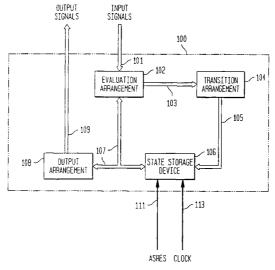
- (74) Agents: BRADEN, Stanton, C. et al.; Siemens Corporation Intellectual Property Dept., 186 Wood Ave. South, Iselin, NJ 08830 (US).
- (81) Designated States (national): CN, JP, KR.
- (84) Designated States (regional): European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, 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:
 6 June 2002

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: METHOD AND APPARATUS FOR AN IMPROVED RESET AND POWER-ON ARRANGEMENT FOR A DRAM GENERATOR CONTROLLER



(57) Abstract: In a flexible programmable controller (100) for controlling a generator system on a memory chip, the controller operates as a state machine in accordance with a state diagram including a plurality of X states. A state storage device (106) is responsive to input signals indicating a Reset state or a change in the state diagram from a current state to a next state for generating a Reset and an associated complementary Set signal or a revised plurality of X state output signals comprising a true State signal and a complementary true State signal for the next state of the plurality of X states. An output arrangement (108) is responsive to the Reset and complementary Set signals or the true State signal and the complementary true State signal in the revised plurality of X state output signals from the state storage device for generating separate predetermined ones of M output signals (OUTO-OUT4) associated with one of the Reset state or next state for controlling the generator system.



WO 01/71721 A3

INTERNATIONAL SEARCH REPORT

Interr nal Application No PCT/US 01/08302

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 G11C11/4074									
According to International Patent Classification (IPC) or to both national classification and IPC									
B. FIELDS	SEARCHED currentation searched (classification system followed by classification	on symbols)							
IPC 7		······································							
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched									
Electronic d	ata base consulted during the international search (name of data ba	ise and, where practical, search terms used)						
EPO-Internal									
C. DOCUMENTS CONSIDERED TO BE RELEVANT									
Category °	Citation of document, with indication, where appropriate, of the re	levant passages	Relevant to claim No.						
А	US 5 933 385 A (LO PING ET AL) 3 August 1999 (1999-08-03)	. 10	1-20						
	column 1, line 30 -column 2, line column 2, line 56 -column 3, line abstract; figure 1								
A	US 5 301 278 A (SIDOLI PAOLO G 5 April 1994 (1994-04-05) column 1, line 22 -column 2, line column 2, line 60 -column 3, line column 4, line 56 -column 5, line abstract: figure 2	1-20							
	abstract; figure 2 								
Further documents are listed in the continuation of box C. Patent family members are listed in annex.									
° Special ca	tegories of cited documents:	*T* later document published after the inte							
'A' document defining the general state of the art which is not considered to be of particular relevance or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention									
filling date cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone									
citatio	which is cited to establish the publication date of another citation or other special reason (as specified) *O* document referring to an oral disclosure, use, exhibition or other means *O* document is combined with one or more other such document is combined with one or more other such documents, such combination being obvious to a person skilled								
other "P" docume later th	means ant published prior to the international filing date but nan the priority date claimed	in the art. *&* document member of the same patent	•						
Date of the	actual completion of the international search	Date of mailing of the international sea	arch report						
2	1 March 2002	28/03/2002							
Name and r	nailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2	Authorized officer							
	NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Nguyen Xuan Hiep, C							

1

INTERNATIONAL SEARCH REPORT

Interronal Application No

	ormation on patent family members				PCI/US	01/08302
Patent document cited in search report		Publication date		Patent family member(s)		Publication date
US 5933385	Α	03-08-1999	NONE			
US 5301278	Α	05-04-1994	EP JP	033922 ² 2012541	A2 . A	17-01-1990