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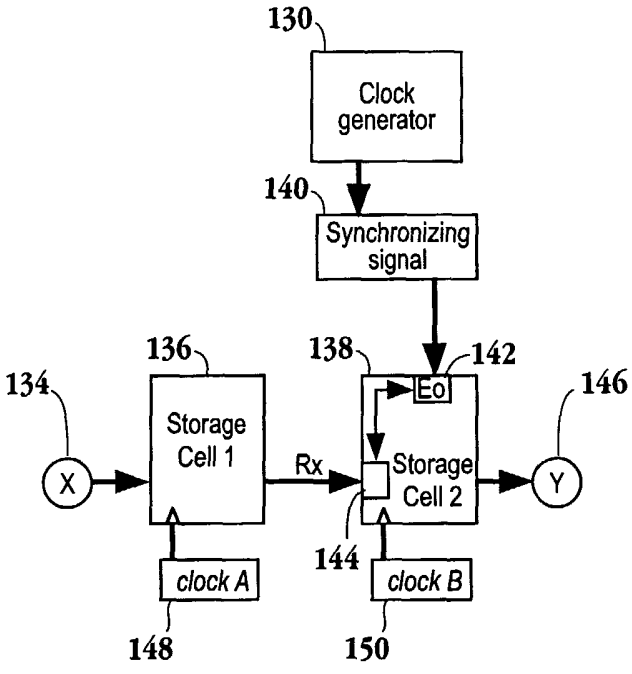
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(54) Title: SYNCHRONOUS DATA TRANSFER ACROSS CLOCK DOMAINS



(57) Abstract: A method for communicating across first and second frequency domains of an integrated microchip is provided. The method initiates with determining a clock ratio between the first frequency domain and the second frequency domain. The first frequency domain is associated with a faster clock cycle. Then, a synchronizing signal based upon the clock ratio is generated. The synchronizing signal coordinates communication of data between the first and second frequency domains. Next, the data is transferred between respective frequency domains according to the synchronizing signal. A microchip and a system enabling synchronous data transfer across different frequency domains are also provided.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G06F1/12

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 G06F

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, INSPEC, COMPENDEX, 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	US 5 459 855 A (LELM CHARLES A) 17 October 1995 (1995-10-17)	1,5-8
Y	figures 1-5 column 2, line 10 - column 2, line 48 column 7, line 2 - column 7, line 12	2-4,9-19
Y	US 5 961 649 A (GADAGKAR ASHISH S ET AL) 5 October 1999 (1999-10-05) figures 2-5 column 3, line 55 - column 6, line 7	2-4,9-19
A	US 5 703 502 A (YANG LAWRENCE R ET AL) 30 December 1997 (1997-12-30) figures 1-4 column 2, line 12 - column 2, line 45	1-19

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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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Name and mailing address of the ISA	Authorized officer
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INTERNATIONAL SEARCH REPORT

nformation on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5459855 A	17-10-1995	NONE	
US 5961649 A	05-10-1999	NONE	
US 5703502 A	30-12-1997	NONE	