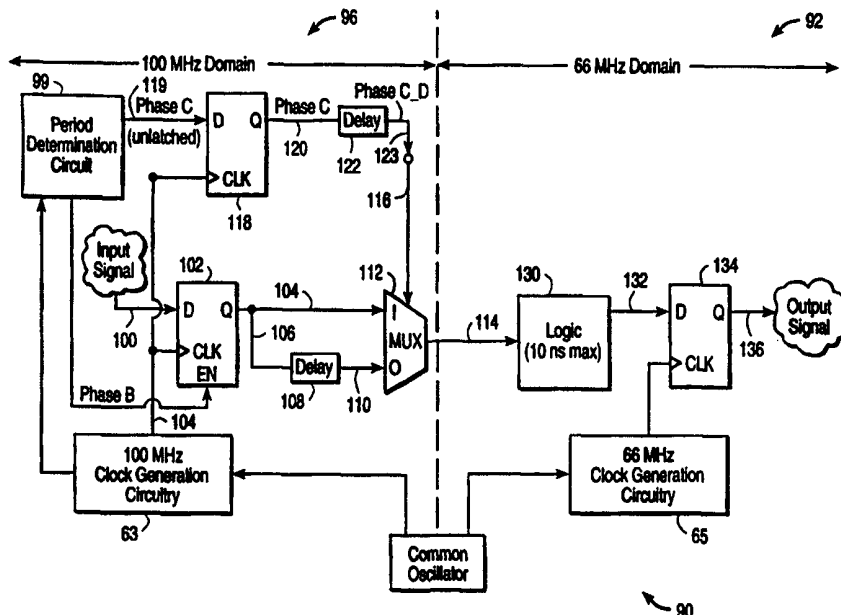




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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<p>(21) International Application Number: PCT/US98/23773 (22) International Filing Date: 9 November 1998 (09.11.98) (30) Priority Data: 08/985,390 4 December 1997 (04.12.97) US (71) Applicant (for all designated States except US): INTEL CORPORATION [US/US]; 2200 Mission College Boulevard, Santa Clara, CA 95052 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): KHANDEKAR, Narendra [IN/US]; 1245 Humbug Creek Court, Folsom, CA 95630 (US). GADAGKAR, Ashish, S. [IN/US]; 448A Costa Mesa Terrace, Sunnyvale, CA 94086 (US). KUBICK, Robert, F. [US/US]; 2335 Loch Way, El Dorado Hills, CA 95762 (US). VONBOKERN, Vincent, E. [US/US]; 3500 Lapis Court, Rescue, CA 95672 (US). MUTHAL, Manish [IN/US]; 110 Chessell Court, Folsom, CA 95630 (US). (74) Agents: TAYLOR, Edwin, H. et al.; Blakely, Sokoloff, Taylor &amp; Zafman LLP, 7th floor, 12400 Wilshire Boulevard, Los Angeles, CA 90025 (US).</p>		<p>(81) Designated States: AL, AM, AT, AT (Utility model), AU (Petty patent), AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ (Utility model), DE, DE (Utility model), DK, DK (Utility model), EE, EE (Utility model), ES, FI, FI (Utility model), GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (Utility model), SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).  <b>Published</b> <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>  (88) Date of publication of the international search report: 26 August 1999 (26.08.99)</p>

(54) Title: METHOD AND APPARATUS FOR PROPAGATING A SIGNAL BETWEEN SYNCHRONOUS CLOCK DOMAINS OPERATING AT A NON-INTEGER FREQUENCY RATIO



(57) Abstract

A method of transmitting a signal from a first clock domain (96) to a second clock domain (92) commences with the generation of first clock and second clock signals (63, 65). The first and second clock signals (64, 62) are substantially synchronous and have respective frequencies that are non integers multiples. A first signal which is generated in the first clock domain (96) responsive to transition of the first clock signal (64) that is substantially coincident with a transition of the second clock signal (62), is prevented from being latched in the second clock domain (92) responsive to the transition of the second clock signal (62). The first clock signal (64) is prevented from being latched for a time period which is greater than a maximum clock skew which may exist between the first and second clock signals (64, 62).

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INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US98/23773

A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) : G06F 1/10  
US CL : 395/559

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)

U.S. : 395/559, 550, 800; 365/230.03,233

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 practicable, search terms used)

APS  
search terms: mask circuit, multiplexer, processor, latch, domain, graphics, clock signal

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 5,448,715 A (LELM et al.) 05 September 1995, column 1, lines 24-65; column 2, lines 12-52; column 3, lines 51-60; column 4, lines 1-44; column 5, lines 14-35; column 6, lines 1-49; column 7, lines 19-37; column 8, lines 27-49; column 11, lines 12-66; column 12, lines 31-45; column 13, lines 4-65; column 14, lines 56-68 and column 15, lines 1-2.	1-13, 16-21, 24-34 ----- 14- 15, 22-23
Y	US 5,777,942 A (DOSAKA et al.) 07 July 1998, column 18, lines 56-67; column 19, lines 1-19; column 42, lines 2-4; column 59, lines 38-57; column 60, lines 20-59; column 110, lines 36-49 and column 131, lines 14-24.	14-15, 22-23

Further documents are listed in the continuation of Box C.  See patent family annex.

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Date of the actual completion of the international search 29 JANUARY 1999	Date of mailing of the international search report <b>08 JUL 1999</b>
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