Title: ASYNCHRONOUS CLOCK GATING CIRCUIT

Abstract: The present disclosure envisages an asynchronous clock gating circuit and a method for designing the asynchronous clock gating circuit. The asynchronous clock gating circuit could be placed at the very beginning of the clock network, given its design and implementation logic. The asynchronous clock gating circuit helps meet the timing requirement on the enable pin thereof. The asynchronous clock gating circuitry avoids cumbersome replication of clock gating circuitry during physical implementation of the (circuit) design, and further helps reduce the power consumption levels in sequential circuits.
Published:

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— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER
H03K19/00, H03L7/00 Version=2017.01

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)
H03K, H03L

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)

Databases: Patseer, IPO Internal Database
Keywords: Power, gating, clock, flip-flop, multiplexer, timing, synchronizer

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>US20140225655 Al (Qualcomm Incorporated), 14 August 2014 (14.08.2014) Figure 2, Abstract, paragraphs [0005], [0006], [0008] -[0012], [0015], [0016] paragraphs [0020]</td>
<td>1-11</td>
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Y


A

US7131092 B2 (Via Technologies, Inc.), 31 October 2006 (31.10.2006) column 1, line 51 - column 2, line 6 column 2, lines 23-34 column 3, line 55 - column 4, line 16

A

US7546559 B2 (Atrenta, Inc.), 09 June 2009 (09.06.2009) page 1, line 10 - page 11, line 37; figures 1,3,4

2,4,8,10

☐ 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 10-02-2017

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