**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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| In re Patent of: | Peter B. Gillingham et al. | |
| U.S. Patent No.: | 10,140,028 | Attorney Docket No. 60246-0008IP1 |
| Issue Date: | November 27, 2018 | |
| Appl. Serial No.: | 15/957,120 | |
| Filing Date: | April 19, 2018 | |
| Title: | CLOCK MODE DETERMINATION IN A MEMORY SYSTEM | |

# VOLUNTARY SEARCH DISCLOSURE
# DECLARATION OF KENNETH DARBY



INFINEON 1104
Infineon v. Mosaid
IPR2025-01456

I, Kenneth Darby, declare as follows:

1. I am an attorney at Fish & Richardson PC, counsel of record for Infineon Technologies Americas Corp. (Petitioner). I am a member of the State Bar of Texas in good standing and admitted to practice before the U.S. Patent and Trademark Office.

2. I submit this declaration voluntarily on behalf of Petitioner in response to the November 17, 2025 Memorandum titled "Voluntary Search Disclosure Declarations as a Favorable Factor in Institution Decisions" (the Memorandum).

3. This declaration provides a description of where relevant prior art was located and the general methods used to find that art. This declaration does not disclose counsel's legal analyses, mental impressions, or internal strategy; nothing herein should be construed as a waiver of attorney-client privilege or work-product protection. Consistent with the Memorandum, this declaration is offered to assist the Office in understanding the search pathways employed.

4. Petitioner engaged a specialized third-party prior-art search firm to locate prior art that was not identified by the examiner during the examination of U.S. Patent No. 10,140,028.

5. I have investigated and been informed by the search firm that the search methodology employed by the search firm used multiple, complementary pathways,

including keyword searching, Boolean strings, Cooperative Patent Classification (CPC) and International Patent Classification (IPC) classification traversals, and assignee/inventor-targeted search passes, in addition to AI tools for semantic and contextual search passes.

6. The search spanned both patent and non-patent literature, including Orbit Intelligence (Questel), PQAI, Google Patents, Google Scholar, ACM Library, IEEE Xplore, the Internet Archive (WayBack Machine).

7. Orbit Intelligence supports proximity-operator and assignee/inventor logic; PQAI supports searching using AI models trained on patent examination records; Google Patents supports semantic and classification-aware passes as well as rapid iteration; Google Scholar/ACM Library/IEEE Xplore targets academic and standards-adjacent literature; Internet Archive verifies date stamps and recovers historical pages.

8. The classification-based search employing IPC/CPC included G11C classes. Classification scoping was used both as a starting lens and as a validation cross-check for Boolean/keyword results.

9. Most searches applied a strict priority cut-off before February 16, 2007 to ensure qualifying prior art.

10. To complement classification, keyword/Boolean, and semantic passes, the search included targeted queries for major assignees and notable inventors in the space to surface additional families and disclosures that concept-only searches might miss.

11. The search also used AI tools like those provided by Patentfield (https://en.patentfield.com/#/) and PQAI (https://search.projectpq.ai/) that are designed to look beyond literal keyword matches and capture semantic and contextual similarity. The search further involved using AI tools like DeepSeek AI (https://deepsikai.com/) and ChatGPT (https://chatgpt.com/) to expand synonym sets and generate candidate semantic prompts executed in authoritative databases.

12. No privileged or non-public attorney analysis was included in prompts, and outputs were used to augment search and query development.

13. This searching was reviewed by attorneys and further supplemented by attorneys that performed additional searching of one or more of the same search resources discussed above, including supplemental searching for non-patent literature via Google Scholar and text searching using the Google search engine, publicly available technical documentation and white papers from companies active in the field, for example, Samsung, Micron, and SK Hynix, and supplemental

searching for patent literature via PatSnap, including text string searching, semantic searching, and similarity score searching.

14. This declaration is a good-faith general description of publicly accessible methods and sources used to locate prior art. It is not exhaustive, does not concede materiality or any legal issue, and should not be read to describe counsel's privilege-protected analysis. To avoid waiver of protected work product and proprietary search know-how, this public filing does not disclose the complete, exact, strings executed.

15. I declare that all statements made in this Declaration of my own knowledge are true and that all statements made on information and belief are believed to be true. I further declare that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both (under Section 1001 of Title 18 of the United States Code).

Executed this 26th day of November, 2025.

***/Kenneth Wayne Darby Jr./***

Kenneth Wayne Darby Jr.