

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ADVANCED MICRO DEVICES INC.
Petitioner

v.

FERMAT INTERNATIONAL, INC.
Patent Owner

U.S. Patent Nos. 11,886,750
Issue Date: January 30, 2024

Title: ANALYTICS, ALGORITHM ARCHITECTURE, AND DATA
PROCESSING SYSTEM AND METHOD

Inter Partes Review No. 2026-00358

DECLARATION OF ROBERT BISMUTH

I, Robert Bismuth, declare the following:

1. I am the first named inventor on U.S. Patent Nos. 11,550,512, 11,886,750, and 12,271,636 and the President and CEO of Fermat International, Inc. (“Fermat”). I submit this Declaration in support of Patent Owner’s Request for Discretionary Denial of Institution of Petition for *Inter Partes* Review in IPR2026-00358, -00359 and -00360, respectively.
2. Fermat is a small company that operated in the U.S. and France manufacturing near memory high speed compute modules for servers that included flash-based storage and significant DRAM memory. At its largest, Fermat had approximately 10 employees.
3. Fermat is a domestic Delaware-based corporation incorporated on January 30, 2019.
4. When originally founded, French company SAS Fermat was the parent of Fermat International, Inc. However, in 2023, Fermat inverted control of the company so that Fermat International, Inc. became the parent company, and SAS Fermat became its subsidiary. That was done for two reasons. First, raising capital for deep technology ventures like Fermat is easier in the U.S., and second, the majority of potential customers for Fermat’s products were in the U.S.
5. Fermat’s founders and inventors are U.S. citizens. Garth Macbeth, CFO of

Fermat, and I live in the Seattle area.

6. Fermat sold its computation solutions primarily to U.S.-based customers.

The U.S.-based company Micron was Fermat's largest customer. A photograph I took of Fermat's commercialized module is shown below:



7. As part of the shift to the United States and away from SAS Fermat, Fermat intended to move its manufacturing from Switzerland to the U.S. In 2023, I met with manufacturers in Washington state and toured their facilities in preparation to begin U.S. manufacturing. However, by the end of 2023, Fermat was faced with increased competition from major vendors like Petitioner who were adopting architecture covered by Fermat's issued U.S. patents. Even though Fermat's products still held a performance advantage, the ability of major companies like Petitioner to sell to and support the customers Fermat was targeting was beyond Fermat's capability. In other

words, scaling Fermat was proving difficult due to market competition from large companies like Petitioner that had adopted Fermat's patented technology. As a result, Patent Owner liquidated SAS Fermat in 2024.

8. Fermat met with a number of companies seeking customers and partners.

One company we met with was FPGA manufacturer Xilinx, Inc. On January 11, 2019, Arnaud Blandin, then the VP of Business Development for Fermat, met with Manish Muthal of Xilinx to discuss the prospect of collaborating.

Mr. Blandin then arranged a meeting between Mr. Muthal and myself for January 25, 2019 at Xilinx' San Jose offices. At the meeting, I discussed

Fermat's technology and showed Mr. Muthal a functioning Fermat module.

Mr. Muthal was impressed and was interested in Xilinx potentially investing in Fermat. Mr. Muthal offered to set up a follow up meeting under NDA

with technical staff and corporate development/venture investing staff.

However, no further meeting was ever scheduled.

9. I understand that Xilinx was later acquired by Advanced Micro Devices, Inc.

Dated: July 16, 2026

Respectfully submitted,

By:



Robert Bismuth
President & CEO, Fermat International, Inc.