

VLSI TECHNOLOGY LLC v. INTEL CORP., Appeal No. 2022-1906 (Fed. Cir. December 4, 2023). Before Lourie, Dyk, and Taranto. Appealed from W.D. Tex. (Judge Albright).

Background:

VLSI owns a patent directed to a technique for managing the minimum operating voltage for a memory in an integrated circuit. In relevant part, VLSI's patent claims cover a memory and a processor that are configured to receive different supply voltages when the voltage supply to the processor falls below a threshold. Specifically, in a power saving mode, when the voltage supplied to the processor falls below the threshold, the memory switches to receive voltage supply from a dedicated power supply. VLSI sued Intel for infringement based on sales of its Haswell and Broadwell microprocessors.

A district court jury decision found that Intel literally infringed all asserted claims of VLSI's patent. Intel appealed.

Issue/Holding:

Did the district court err in upholding the jury's finding that Intel infringed the asserted claims of VLSI's patent? No, affirmed.

Discussion:

On appeal, the Federal Circuit held there was substantial evidence to support the jury's verdict that Intel literally infringed VLSI's patent.

Intel argued that the "minimum operating voltage" used in its products was not the minimum voltage at which the memory could retain data and, therefore, did not meet the claim limitations. The Federal Circuit considered VLSI's expert testimony at the trial, which discussed Intel's component specifications for Haswell and Broadwell microprocessors and the fact that the alleged "minimum operating voltage" settings ("voltage 1") are referred to in the component specifications as the "worst case retention voltage." Intel argued that this evidence does not constitute substantial evidence because, as was presented by Intel's own expert witness, the memory in Intel's products is operational and retains data at a different voltage ("voltage 2"), lower than voltage 1. However, the Federal Circuit determined that Intel's expert testimony was based on measuring voltage 1 and voltage 2 at different operating temperatures. If they were measured at the same temperature, voltage 1 was in fact the "minimum operating voltage." Thus, the jury's finding was not unreasonable.

Intel also argued that the claimed "when" limitations require that the processor voltage usage falling below the minimum operating voltage be the trigger for switching the voltage of the memory. The Federal Circuit held that this was an argument for claim construction and that when a phrase is not construed, courts should defer to the jury unless it is contrary to the only reasonable view of the claim element. Here, "when" can simply mean "at the time that," and Intel's product indeed supplies a memory with the lower voltage at the time that the voltage for the processor is powered down.