

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

PARTHENON UNIFIED MEMORY ARCHITECTURE LLC,	§	Case No. 2:14-cv-902-JRG-RSP
	§	(Lead)
	§	
Plaintiff,	§	
v.	§	
	§	
SAMSUNG ELECTRONICS CO. LTD. and SAMSUNG ELECTRONICS AMERICA, INC.,	§	
	§	
	§	
	§	
HUAWEI TECHNOLOGIES CO. LTD, HUAWEI TECHNOLOGIES USA, INC. and HUAWEI DEVICE USA, INC.,	§	Case No. 2:14-cv-687-JRG-RSP
	§	(Consolidated)
	§	
	§	
MOTOROLA MOBILITY LLC	§	Case No. 2:14-cv-689-JRG-RSP
	§	(Consolidated)
Defendants.	§	
	§	

**PLAINTIFF PARTHENON UNIFIED MEMORY ARCHITECTURE LLC'S
OPENING CLAIM CONSTRUCTION BRIEF**

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I. INTRODUCTION

Plaintiff Parthenon Unified Memory Architecture LLC (“PUMA”) proposes constructions for the terms-in-dispute that are based on the intrinsic and extrinsic evidence.¹ In contrast, Defendants Samsung, Huawei and Motorola propose constructions that improperly import limitations from the specification, add extraneous language not contemplated by the claims, and ignore the inventive features of the patents.

PUMA has asserted nine patents against the Defendants relating to the implementation of shared memory in a computer system. All nine patents were originally assigned to STMicroelectronics, Inc. (“STMicro”), a semiconductor company based in Texas. STMicro filed the patent applications for U.S. Patent No. 5,812,789 and U.S. Patent No. 6,058,459 on the same day, and the two patents substantially overlap in their specifications, figures, and named inventors. Additionally, each of the ’789 Patent and the ’459 Patent explicitly incorporate by reference the specification of the other. Six additional asserted patents—U.S. Patent Nos. 6,427,194; 7,321,368; 7,542,045; 7,777,753; 8,054,315; and 8,681,164—are continuation applications of the ’459 Patent. Together, those eight patents describe inventive systems and methods for selectively allowing multiple devices, such as a CPU and an audio/video decoder, to access a shared memory. The ninth asserted patent, U.S. Patent No. 5,960,464, describes an inventive memory management system that allows a device that typically requires a large contiguous block of memory, such as a video decoder, to share noncontiguous memory with other devices.

STMicro previously asserted the ’789 Patent in a patent infringement suit against Motorola Inc. in the Eastern District of Texas, Sherman Division. As part of that case, on July 16, 2004,

¹ Most of the terms at issue here were recently briefed and argued in separate consolidated cases brought by PUMA (bus, real time, fast bus, coupled, directly supplied, display device/display adapter, and control circuit). See Parthenon Unified Memory Architecture LLC v. HTC Corp., Case Nos. 2:14-cv-690-JRG (Lead), 2:14-cv-691-JRG-RSP.

Judge Davis entered a claim construction order construing the terms “shared bus,” “real time operation” and “arbiter,” which are all implicated in the current claim construction dispute. *See STMicroelectronics, N.V. v. Motorola Inc.*, 327 F. Supp. 2d 687 (E.D. Tex. 2004). PUMA’s constructions for those terms adopt the constructions previously applied by Judge Davis, which are consistent with how the terms are used in the patent specifications and with how a person of ordinary skill in the art would interpret these common terms. In contrast, Defendants’ constructions deviate from Judge Davis’s claim construction order by incorporating extraneous concepts that are inconsistent with the intrinsic and extrinsic evidence.

For other terms, Defendants’ constructions either read out embodiments of the inventions disclosed in the patent specification and figures or improperly import limitations from the specification, whichever serves their needs at the moment. Instead of proposing constructions that adhere to the intrinsic evidence, Defendants’ claim construction efforts are an attempt to manufacture non-infringement arguments by restricting the scope of the asserted claims. Additionally, because many of Defendants’ proposed constructions insert extraneous language not found in the patents, Defendants’ constructions increase the risk of confusion.

PUMA’s constructions, on the other hand, seek to provide the Jury and the Court with guidance for understanding the elements of the claimed inventions without either restricting or broadening their true scope. Because PUMA’s proposed constructions are firmly rooted in the intrinsic and extrinsic evidence and are consistent with Judge Davis’s previous claim construction order, PUMA respectfully requests that the Court adopt its proposed constructions.

II. OVERVIEW OF PATENTED TECHNOLOGY

All of the asserted patents in this case relate to sharing memory in a computer system. The ’789 Patent, ’459 Patent, ’194 Patent, ’368 Patent, ’045 Patent, ’753 Patent, ’315 Patent, and ’164 Patent are generally directed toward novel systems and architectures that allow for multiple

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