Paper No.	
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

INTELLECTUAL VENTURES MANAGEMENT, LLC Petitioner

V.

Patent of XILINX, INC.
Patent Owner

Case IPR2012-00018
Patent 7,566,960
Title: INTERPOSING STRUCTURE

PATENT OWNER'S PRELIMINARY RESPONSE BY XILINX UNDER 37 C.F.R. §§ 42.107



TABLE OF CONTENTS

Intr	ductionduction	3
I.	Reasons Why No Inter Partes Review Should Be Instituted	5
A	IVM Failed to Identify All Real Parties in Interest	5
E	No Trial Should Be Instituted for Ground 1	9
	1. Chakravorty '419 does not disclose an "array of landing pads disposed on an inside surface of the integrated circuit package"	9
	2. Chakravorty '419 does not disclose "solder balls disposed on an outside surface"	12
	3. Chakravorty '419 does not disclose that "first pattern and the second pattern are substantially identical"	
C	No Trial Should Be Instituted on Grounds 2-4	15
Γ	No Trial Should Be Instituted on Ground 5	15
	1. IVM does not identify any new teaching in Chung or Chakravorty '36215	
	2. Chung does not disclose "array of landing pads disposed on an inside surface of the integrated circuit package"	
E	No Trial Should Be Instituted for Ground 6	18
F	No Trial Should Be Instituted for Ground 7	20
(No Trial Should Be Instituted for Ground 8	20
F	No Trial Should Be Instituted for Ground 9	22
II.	Conclusion	23
Cer	ficate of Service	24



Patent Owner Xilinx, Inc. ("Xilinx") submits the following preliminary response to the Petition filed by Intellectual Ventures Management ("IVM") on September 17, 2012 requesting inter partes review of claims 1-13 of U.S. Patent No. 7,566,960 (the "'960 Patent"). Xilinx respectfully requests that the Board decline to institute *inter partes* review of the '960 patent.

INTRODUCTION

In October 2003, Inventor Robert O. Conn filed a patent application on a new way to effectively provide power to high speed integrated circuit devices. ('960 Patent, IVM 1001.). The Conn invention addressed a well-known problem stemming from advances in semiconductor manufacturing that allowed integrated circuit devices to reach switching frequencies in the hundreds of megahertz. These high frequencies introduced detrimental noise into the power leads of integrated circuitry. While it was known to reduce noise on the power leads with a decoupling capacitor, the wiring between the integrated circuit and the capacitor could itself produce unacceptable levels of parasitic inductance at high switching speeds. To address this problem, Inventor Conn positioned the capacitor closer to the integrated circuit, minimizing the length of wiring between them and the associated parasitic inductance. Specifically, Conn found that a capacitive element could be packaged with the integrated circuit die, *inside* the encapsulating package.



Conn devised various embodiments of this technology, including some that provide a wafer-thin capacitive interposer, or caposer, suitable for placement between an integrated circuit die and its surrounding packaging. In addition to solving Conn's original challenge, the inventive structure provided other benefits. For example, the caposer could be tailored so that the resulting packaged circuit is tailored to a specific application by matching the die circuitry to the characteristic impedance of a printed circuit board. Thus, the performance of an integrated circuit could be customized without requiring any redesign of the circuitry itself. The US Patent Office granted U.S. Patent No. 7,566,960 to Inventor Conn for this innovative technology in 2009. The '960 Patent is now assigned to Xilinx, Inc.

Although IVM has no interest in the subject matter of the '960 patent, it has nevertheless requested *inter partes* review based on several prior art references, many of which were already considered during prosecution. These references fail to teach all of the elements of the '960 patent, especially the requirements relating to placing certain components *inside* the encapsulating ceramic package. This is clear from the face of the Petition, which makes assertions about the "inside" claim limitations that the prior art references do not support. Thus Board should deny the Petition *Inter Partes* Review because it fails to show a reasonable likelihood that any claim of the '960 patent is unpatentable.



I. Reasons Why No Inter Partes Review Should Be Instituted

A. IVM Failed to Identify All Real Parties in Interest

Before turning to the merits, IVM's Petition should be denied because it fails to identify all of the real parties in interest as required by 37 C.F.R. § 42.8(b)(1). The requirement to disclose the real parties-in-interest serves the dual purpose of "assisting courts in identifying potential conflicts and to assure proper application of the statutory estoppel provisions." IVM's decision to identify itself as the sole real party in interest frustrates both of these purposes.

It is well-known that IVM is part of a complex web of companies with a "penchant for secrecy." Those who of have attempted to understand IVM's financial interests have located over 1200 related entities. IVM is also known to have a variety of "investors," although the nature of these relationships varies widely. While some investors may have a purely financial stake in IVM and its associated shell companies, other companies are believed to have patent licensing arrangements with IVM. Additionally, IVM provides patents to companies

⁴ *Id.*, ¶ 47.



¹ Patent Trial Practice Guide § I.D.1.

² Tom Ewing & Robin Feldman, "The Giants Among Us," 2012 STAN. TECH. L. REV. 1, ¶ 14, n. 6 (XLNX-2002).

 $^{^{3}}$ *Id.*, ¶ 25.

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