

Paper No. \_\_\_\_\_

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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INTELLECTUAL VENTURES MANAGEMENT, LLC  
Petitioner

v.

Patent of XILINX, INC.  
Patent Owner

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

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**PATENT OWNER'S SECOND SUBSTITUTE MOTION TO AMEND  
BY XILINX UNDER 37 C.F.R. § 42.121**

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## INTRODUCTION

Patent Owner Xilinx, Inc. (“Xilinx”) moves to amend the claims of U.S. Patent No. 7,566,960 (“the ’960 Patent”) under 35 U.S.C. § 316(a)(9) and 37 C.F.R. § 42.121 and provides a “claim-by-claim approach to specifying the contingency of substitution,” as required by *Idle Free Systems, Inc., v. Bergstrom Inc.*, IPR2012-00027, Paper 26 (June 11, 2013) at 10. Specifically, Patent Owner moves to cancel Claims 1-8 and to substitute Claims 14-21, contingent upon a Board determination that Claim 1 is unpatentable, and similarly to cancel Claims 9-13 and to substitute Claims 22-26, contingent upon a Board determination that Claim 9 is unpatentable.

Pursuant to *Idle Free*, “a substitute claim may not enlarge the scope of the challenged claim by eliminating any feature.” *Idle Free* at 5. Further, a substitute claim cannot “introduce[] new matter” and the patent owner must “show written description support in the original disclosure of the patent.” *Idle Free* at 8; *see also* 37 C.F.R. §§ 42.22 and 42.121.

Patent Owner submits that this motion fully complies with these requirements. Specifically, Patent Owner submits that Claims 14-26 do not introduce new matter and are fully supported by the originally filed specification of the ’960 Patent as discussed below in the written description support section. Also, it is submitted that each of Claims 14-26 includes the subject matter of the claim

for which it substitutes and does not enlarge the scope of the challenged claim it replaces.

*Idle Free* further requires that any amendment be responsive to a ground of unpatentability involved in the trial. *Idle Free* at 4-5; see also 37 C.F.R. § 42.121(2)(i). Here, the present amendments comply with this requirement because they include each feature of the claims being replaced and then narrow the interposer feature, which was a specific focus of Petitioner's patentability challenges. See, Petition at pp. 30-37 and 38-49.

**I. Claim Listing**

Claims 1-8 (Canceled)

Claims 9-13 (Canceled)

Claim 14 (Proposed substitute for Claim 1) An assembly, comprising:

an integrated circuit die having an array of micro-bumps disposed on a surface of the integrated circuit die in a first pattern;

an integrated circuit package having an array of landing pads disposed on an inside surface of the integrated circuit package in a second pattern and an array of solder balls disposed on an outside surface of the integrated circuit package,

wherein the first pattern and the second pattern are substantially identical patterns; and

an interposing structure comprising a plurality of tiled interposing structures disposed inside the integrated circuit package between the integrated circuit die and the inside surface of the integrated circuit package, the plurality of tiled interposing structures being held together using an elastomer, the interposer electrically coupling a first micro-bump in a first position in the array of micro-bumps to a first landing pad located opposite to the first position and to a second landing pad in the array of landing pads.

Claim 15 (Proposed substitute for Claim 2): The assembly of claim [[1]] 14, wherein a line extending through the first micro-bump in a direction orthogonal to the surface of the integrated circuit does not extend through the second landing pad of the integrated circuit package.

Claim 16 (Proposed substitute for Claim 3): The assembly of claim [[2]] 15, wherein the surface of the integrated circuit die is a major surface of the integrated circuit die, and wherein the interposing structure has a major surface, and wherein the major surface of the integrated circuit die and the major surface of the interposing structure have roughly identical surface areas.

Claim 17 (Proposed substitute for Claim 4): The assembly of claim [[3]] 16, wherein the interposing structure includes no transistor and no PN junction.

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