IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MICROCHIP TECHNOLOGY INC.,
Petitioner,

v.

APTIV TECHNOLOGIES AG AND APTIV TECHNOLOGIES LIMITED,
Patent Owners.

Case Nos. IPR2024-00494
U.S. Patent No. 9,460,037

PETITIONER'S EXPLANATION FOR AND RANKING OF TWO PETITIONS CHALLENGING U.S. PATENT NO. 9,460,037

I. INTRODUCTION

Pursuant to the November 2019 Consolidated Trial Practice Guide ("Guide"), Petitioner, Microchip Technology Inc. ("Microchip") provides this explanation of multiple petitions challenging U.S. Pat. 9,460,037 (the "'037 patent"). Microchip presents two petitions, each of which applies the same grounds based on three prior art references: U.S. Pat. Pub. 2006/0206650 (EX1014, "Chang"); U.S. Pat. Pub. 2009/0268743 (EX1015, "Chang II"); and U.S. Pat. 8,447,598 (EX1029, "Chutorash"). The petitions differ in respect to the particular claims challenged in each. The multiple petitions are justified by the number of claims Patent Owner has asserted in the related district court litigation (*i.e.*, all 17 claims of the '037 patent), the depth of analysis presented in the petitions, and the petition word limit.

II. EXPLANATION OF MATERIAL DIFFERENCES AND REASONS WHY MORE THAN ONE PETITION SHOULD BE INSTITUTED

Each of the petitions is materially distinguishable from the other by virtue of challenging a unique claim set. The petition in IPR2024-00558 challenges claims 1, 3, 5, and 11-17. The petition in IPR2024-00494 challenges claims 1-2, 4, and 6-10. Claim 1 is the sole independent claim in the '037. Microchip demonstrates unpatentability of claim 1 in IPR2024-00494 solely because doing so in necessary for purposes of challenging the underlying dependent claims. Microchip's analysis of claim 1 is identical in both IPR petitions. Thus, except for the unavoidable

necessity of repeating the claim 1 analysis, there are no overlapping claims in these petitions. Therefore, the petitions present materially different challenges, each to a unique subset of ’037 patent claims.

Microchip notes that Patent Owner has asserted every claim from all six related patents in the district court litigation, for a total of 78 asserted claims. For four of the asserted patents, Microchip filed just one IPR each. But for two of the patents, including the ’037 patent, the number of claims and issues necessitated two IPRs each. Challenging all claims in a single petition would significantly reduce the amount of analysis provided, prejudicing Microchip’s ability to explain the basis of unpatentability in view of the subject matter at issue.

In addition, both petitions provide explanations why the Board should not exercise its discretion to deny institution under §325(d). This includes an analysis of the file histories for all six related patents in the same family, which limits the space available to address the merits of unpatentability.

Accordingly, two petitions are necessary in order to address each of the challenged claims in sufficient detail. Guide, 59 (“[T]here may be circumstances in which more than one petition may be necessary, including, for example, when the patent owner has asserted a large number of claims in litigation.”). The second petition has been filed due to the word count limit for petitions, the number of asserted claims, and the need to address each challenged claim in sufficient detail.

The second petition is not submitted to present additional grounds or unpatentability theories for the same dependent claims addressed in first petition.

Beyond the Guide, additional factors support institution of Microchip's multiple petitions. Microchip is filing both '037 petitions simultaneously, together with two other petitions on related patents that rely on the substantially same prior art and Grounds. This is because, in November 2023, Patent Owner proposed substantial, non-clerical corrections to the independent claims of the '037 patent, U.S. Pat. 9,619,420, and 10,545,899 in its supplemental infringement contentions. *See* EX1072, 118, 125, 186, 339, 408-409, 430. An example is shown below:

Chart of Infringement of U.S. Patent No.9,460,037, Exhibit C		
[1.2]	A USB Hub ~~having~~ [inter-connected to][1] a plurality of USB Ports and inter-connected to the embedded USB Host system	Microchip makes and/or uses a system that practices this element literally and/or under the doctrine of equivalents (including through testing of the Microchip Accused Products); actively induces module makers, car manufacturers, and/or their customers to make, use, offer to sell, sell, and/or import into the United States systems practicing this element literally and/or under the doctrine of

[1] Although claim 1 states "A USB Hub ***having*** a plurality of USB Ports," a POSA would understand from the surrounding claim language and patent specification that claim 1 should read instead "a USB hub ***inter-connected to*** a plurality of USB Ports."

Id., 339 (redlines in original). Aptiv reframed its position during claim construction, arguing that "'having' means possessing." EX1076, 12. Patent Owner's revisions result in substantial architectural changes and significantly broaden the claims. Petitioner disagrees with Patent Owner's constructions and believes the all of the '037 patent claims are indefinite. *See, e.g.*, EX1077, 13-20.

Patent Owner's belated disclosure of its proposed corrections and shifting sands positions necessitated filing IPR petition on the claims of the '037 patent (as

well as the ’899 patent and certain claims of the ’420 patent). Thus, Microchip filed its petitions on the ’037 patent, ’899 patent, and certain claims of the ’420 patent. *See* IPR2024-00494, IPR2024-00558, IPR2024-00495, and IPR2024-00496 (the “Wave 2 Petitions”). The Wave 2 Petitions all rely on substantially similar prior art and arguments. Thus, the Wave 2 Petitions will be able to track the same schedule post-institution, maximizing the efficiency of depositions, briefing, and oral argument. In addition, Microchip uses the same expert witness to support all petitions, which should avoid the necessity of separate depositions for each petition.

III. ORDERING OF PETITIONS

For the reasons discussed above, the Board should grant institution for both petitions. Under the circumstances, a ranking of petitions is not appropriate given that they challenge unique claim sets with no overlap. However, in view of the guidance in the consolidated trial practice guide (Guide, 60), Microchip requests that the Board consider the petitions in the following order.

Order	IPR Case No.	Challenged Claims
1	IPR2024-00558	1, 3, 5, and 11-17
2	IPR2024-00494	1-2, 4, and 6-10

IV. CONCLUSION

Microchip requests that the Board grant institution for both petitions.

Respectfully submitted,

Dated: February 27, 2024

/Travis Jensen/
Travis Jensen, Reg. No. 60,087

CERTIFICATE OF SERVICE

The undersigned hereby confirms that the foregoing PETITIONER'S EXPLANATION FOR AND RANKING OF TWO PETITIONS CHALLENGING U.S. PATENT NO. 9,460,037 was caused to be served on February 27, 2024 via overnight courier on the Patent Owner at the correspondence address of record for U.S. Pat. No. 9,460,037:

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Courtesy copies were also served via email on Patent Owner's counsel of record in a related district court action styled *Aptiv Technologies AG v. Microchip Technology Inc.*, Case No. 1:23-cv-00307-JDW (D. Del., March 20, 2023):

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