

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Intel Corporation
Petitioner

v.

Qualcomm Incorporated
Patent Owner

IPR2018-01154
U.S. Patent No. 8,698,558

PETITIONER'S REPLY

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I. INTRODUCTION

Patent Owner’s Response (“POR”) confirms that the challenged claims of the ’558 patent are invalid. Indeed, the POR’s challenge of Petitioner’s mapping of the limitations to the cited references is based on arguments that Patent Owner’s (“PO”) own expert, Dr. Arthur Kelley, contradicted during cross-examination and on an improper claim construction.

First, PO’s arguments that Kwak’s feedforward path does not increase the inductor current is based on diagrams that, as Dr. Kelley admitted in deposition, do not depict Kwak, on a misinterpretation of Kwak’s Figure 11, and on an erroneous assumption that Kwak’s feedforward path affects only the inductor current phase.

Second, PO seeks to re-write the claim elements in the guise of claim construction. But its proffered construction contradicts the surrounding claim language, would exclude disclosed embodiments, and is inconsistent with the specification—as Dr. Kelley admitted in deposition. *See* Ex. 1229 [Kelley Transcript], 35:15-36:1; 37:5-16; 37:20-38:11; 133:4-135:9; *see also EPOS Techs. Ltd. v. Pegasus Techs. Ltd.*, 766 F.3d 1338, 1347 (Fed. Cir. 2014) (rejecting construction “because it reads out preferred embodiments”); *see also Dow Chem. Co. v. Sumitomo Chem. Co.*, 257 F.3d 1364, 1378 (“a claim construction that excludes a preferred embodiment is ‘rarely, if ever, correct.’”).

Third, PO's critique that modifying Kwak to add Choi 2010's boost converter "would not be possible without undue experimentation" (POR, 42) is wrong. PO does not dispute the benefits identified by Petitioner with regard to the motivation to combine Kwak and Choi 2010 (Petition, 63-67). *See*, POR, 41-43. Instead, PO argues that each of Kwak and Choi 2010 includes controllers that the other disparages. This is irrelevant, however. As Dr. Kelley admitted, adding a boost converter in a modulator powered by a battery supply was within the skill of a person of ordinary skill in the art ("POSA"). Ex. 1229, 152:21-153:4; 283:16-284:1.

For these reasons, as set forth more fully below, PO's arguments should be rejected and the challenged claims found unpatentable.

II. CLAIM CONSTRUCTION

A. PO's Proposed Construction Is Wrong

PO contends that the term "the envelope amplifier operates based on the first supply voltage or the boosted supply voltage" should be construed such that "the envelope amplifier must be able to operate, selectively, based on either the first supply voltage or the boosted supply voltage (referred to herein as a 'selective boost')." (POR, 11, 35.) According to Patent Owner, an amplifier that received only the first voltage or only the boosted voltage would not meet this limitation. This proposed construction is far from the broadest reasonable construction of

“or,” is contrary to the plain meaning, and excludes disclosed embodiments. It should be rejected.

1. PO’s Proposed Construction Contradicts The Plain Claim Language

Claim 19 recites an “envelope amplifier” that “operates based on the first supply voltage *or* the boosted supply voltage.” Ex. 1201, 14:25-27. As Dr. Kelley conceded, the term “or” is a conjunction that identifies two alternatives: this “or” that. (Ex. 1229, 130:10-18 (“Q. I’m asking at the Schoolhouse Rock level, or is a conjunction that joins two alternatives, correct? A. Well, if we’re going to import Schoolhouse Rock into the deposition, in that context, yes, it is.”).) Under its plain meaning, the requirement for an amplifier that operates based on “the first supply voltage *or* the boosted supply voltage” is met by an amplifier that operates based on either alternative alone. (*Id.* at 130:19-131:2 (“Q....If I said I would like coffee *or* tea, you could give me tea and that would meet my requirement, right? A. In that hypothetical abstract outside the bounds of the ’558, sure.”). PO has identified no sound basis to deviate from that broad plain meaning. Ex. 1228, ¶5.

To the contrary, PO concedes that the common meaning of “or” in patent claims is to recite alternatives. *See*, POR, 39 (“The use of ‘or’ is sometimes an acceptable mechanism for claiming alternatives such that only one of the limitations need be found in the prior art to support anticipation.”) And that is exactly how Hon. Dana M. Sabraw construed “or” in the related district court

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