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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CISCO SYSTEMS, INC. and DISH NETWORK, LLC Petitioners

V.

TQ DELTA, LLC Patent Owner

Case No. IPR2016-01020 Patent No. 9,014,243

PATENT OWNER RESPONSE UNDER 37 CFR § 42.120



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I. INTRODUCTION

Patent Owner TQ Delta, LLC submits this Patent Owner Response under 37 CFR §42.120 to the Petition filed by Cisco, Inc. requesting *inter partes* review for claims 1–25 of U.S. Pat. No. 9,014,243 ("the '243 patent").

The Board instituted *inter partes* review on two grounds:

- 1. whether claims 1–3, 7–9, 13–16, and 20–22 of the '243 patent are unpatentable under 35 U.S.C. § 103(a) over U.S. Pat. No. 6,144,696 ("Shively") and U.S. Pat. No. 6,625,219 ("Stopler"); and
- 2. whether claims 4–6, 10–12, 17–19, and 23–25 of the '243 patent are unpatentable under 35 U.S.C. § 103(a) over Shively, Stopler, and U.S. Pat. No. 6,424,646 ("Gerszberg").

After institution, additional parties—including: Dish Network, LLC; Comcast Cable Communications, LLC; Cox Communications, Inc.; Time Warner Cable Enterprises LLC; Verizon Services Corp.; and ARRIS Group, Inc.—filed petitions that are identical in all substantive respects to the Cisco Petition. *See* IPR2017-00254 and IPR2017-00418. These additional parties moved to join as petitioners, and collectively with Cisco, are referred to herein as "Petitioners." For brevity, this Patent Owner response will cite only to the Cisco Petition and its corresponding exhibits.

In the Institution Decision, the Board did not reach the merits of Patent Owner's arguments in the Patent Owner Preliminary Response, but rather



characterized them as "attorney argument" and accepted Petitioners' expert declarant's testimony as true because Patent Owner did not support it's argument with expert testimony. This Patent Owner Response is fully supported by the cited evidence, including the declaration of Dr. Robert T. Short.

The Petition fails to prove, by a preponderance of the evidence, that any claim of the '243 patent is unpatentable because there is no credible or accurate evidence demonstrating why one having ordinary skill in the art would have combined Shively and Stopler. Petitioners' rationale for the combination fundamentally relies on the contention that Shively suffers from a problem (*i.e.*, a problem with its "peak-to-average power ratio" or "PAR") that Stopler solves the purported problem by performing "phase scrambling." But, Shively does not have a PAR problem so there would have been no motivation to look for a solution.

Furthermore, Stopler does not disclose phase scrambling as recited in the claims.

Petitioners misunderstand the teachings of these references, make unsupported assumptions having no basis in fact, and, ultimately rely on only hindsight bias to cobble together the references.

As such, Petitioners' grounds for alleged obviousness fail. Patent Owner respectfully requests that the Board issue a Final Written Decision finding that Petitioners did not meet their burden to prove unpatentability of claims 1–25 of the



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