

EXHIBIT 15

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re *inter partes* review of:

U.S. Patent 8,542,643 to Gan, *et al.*

Atty. Docket: 3559.001IPR4

Filed: Herewith

For: **Approach for Managing the Use
of Communications Channels
Based on Performance**

**Declaration of Dr. Zhi Ding in Support of
Petition for *Inter Partes* Review of U.S. Patent No. 8,542,643**

Mail Stop Inter Partes Review

Attn: Patent Trial and Appeal Board

Commissioner for Patents

PO Box 1450

Alexandria, VA 22313-1450

Commissioner:

I, Dr. Zhi Ding, declare as follows:

1. I have been retained on behalf of Marvell Semiconductor, Inc., MediaTek Inc., and MediaTek USA, Inc. for the above-captioned *inter partes* review proceeding. I understand that this proceeding involves U.S. Patent No. 8,542,643 to Gan, *et al.*, titled “Approach for Managing the Use of Communications Channels Based on Performance” (“the ’643 patent”) and that the ’643 patent is currently assigned to Bandspeed, Inc.

Marvell Semiconductor, Inc.
MediaTek Inc.
MediaTek USA, Inc.

to communicate with the participant.” (*Id.*, 8:45-46, emphasis added.) That is, a bad channel is “replaced” with a good channel by selecting the good channel instead of the bad channel for use in the hopping sequence.

39. Additionally, the explicit language of the claims require that the act of replacement be performed by a “*selection kernel*.” As would be understood by one of ordinary skill in the art, a selection kernel **selects** channels to use for transmission of data. The selection kernel outputs an address to address a register and may address the same bad channel multiple times: “the same bad channel can be replaced by another randomly selected good channel when, at a later time, the section kernel addresses the bad channel.” (*Id.*, 19:47-54, 21:9-13.) The bad channel can only be addressed (selected) multiple times by the selection kernel if the bad channel remains in the default channel register (i.e., is not removed and/or overwritten) and is only replaced by a good channel when selected for use in the hopping sequence.

40. I note during prosecution Patent Owner took an impermissibly narrow interpretation of the replacing limitation. Specifically, Patent Owner alleged that the claims require the removal of an identified bad channel from the default channel register and storage of a good channel in its location. I disagree with Pa-

XIII. Conclusion

277. In signing this declaration, I recognize that the declaration will be filed as evidence in a contested case before the Patent Trial and Appeal Board of the United States Patent and Trademark Office. I also recognize that I may be subject to cross-examination in the case and that cross-examination will take place within the United States. If cross-examination is required of me, I will appear for cross-examination within the United States during the time allotted for cross-examination.

278. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

Executed this 5th day of January 2015 in DAVIS, CA, 95618, USA

Respectfully submitted



Dr. Zhi Ding

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