

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.
Petitioner

v.

DSS TECHNOLOGY MANAGEMENT, INC.
Patent Owner

Case IPR2015-00369
Patent 6,128,290

PETITIONER'S REPLY TO PATENT OWNER RESPONSE

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EXHIBIT LIST

Apple Exhibit No.	Description
APL 1001	U.S. Patent No. 6,128,290 to Carvey (“the ’290 patent”)
APL 1002	T. J. Barber, Jr., “BodyLAN™: A Low Power Communications System,” Master’s Thesis at Massachusetts Institute of Technology, 1996 (“Barber”)
APL 1003	U.S. Patent No. 5,241,542 to Natarajan (“Natarajan”)
APL 1004	U.S. Patent No. 4,887,266 to Neve (“Neve”)
APL 1005	Prosecution History of U.S. Application No. 08/949,999 (now U.S. Patent No. 6,128,290) (“the ’999 application”)
APL 1006	U.S. Application No. 08/611,695 (as-filed) (“the ’695 application”)
APL 1007	Apple’s Claim Construction Brief in Case No. 6:13-cv-00919 JDL (EDTX)
APL 1008	Declaration of Jack D. Grimes, Ph.D. in Support of Petition for <i>Inter Partes</i> Review of U.S. Patent No. 6,128,290 (“Grimes Dec.”)
APL 1009	Curriculum Vitae of Jack D. Grimes, Ph.D. (“Grimes CV”)
APL 1010	INTENTIONALLY BLANK
APL 1011	Deposition Transcript of Robert Dezmelyk, IPR2015-00369 and IPR2015-00373, December 15, 2015 (“Dezmelyk Depo.”)
APL 1012	Mischa Schwartz, Telecommunications Networks: Protocols, Modeling and Analysis, Addison-Wesley, 1988 (“Schwartz”)
APL 1013	Tom Sheldon, Encyclopedia of Networking & Telecommunications, Lisa Wolters-Broder ed., McGraw Hill, 2001 (other excerpts submitted as DSS 2010)
APL 1014	Declaration of Dr. Jing Hu (“Hu Dec.”)
APL 1015	<i>Curriculum Vitae</i> of Dr. Jing Hu

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I. Introduction

Claims 1-4 of the '290 patent at issue in this *inter partes* review are merely a combination of well-known concepts. Each and every limitation is either expressly disclosed in the prior art or would have been plainly obvious to a person of ordinary skill in the art ("POSA").

DSS's sole argument in its Patent Owner's Response is that the combination of Natarajan and Neve does not teach or suggest a server transmitter that operates in "low duty cycle RF bursts." Although this term was not commonplace, the technical features it describes were well-known to those of ordinary skill in the art.

DSS's argument is flawed for at least four reasons. First, Natarajan teaches or suggests a server transmitter operating in "low duty cycle RF bursts." Second, DSS bases its argument on the inaccurate premise that HDLC is inconsistent with low duty cycle RF bursts. In particular, DSS erroneously assumes that HDLC uses idle words. Third, DSS uses faulty logic to define "low duty cycle" and imposes an arbitrary 10% maximum threshold. And fourth, DSS bases its positions on the testimony Mr. Dezmelyk, which lacks credibility, particularly because he admits that he is not an expert in HDLC.

Accordingly, DSS's argument is meritless. Apple has shown by a preponderance of the evidence that claims 1-4 of the '290 patent are unpatentable and the Board should enter judgment in accordance therewith.

II. Natarajan teaches or suggests a server transmitter operating in “low duty cycle RF bursts,” as recited in claim 1 of the ’290 patent.

The vague term “low duty cycle RF bursts” is not defined in the ’290 patent. As the Board correctly recognized in the Institution Decision, under the broadest reasonable interpretation of this term, Natarajan’s “scheduled multi-access protocol in which time is divided into fixed-length frames, along with Natarajan’s description of frames being divided into slots and multiple subframes” demonstrates that Natarajan discloses “said server and peripheral transmitters being energized in low duty cycle RF bursts.” (Institution Decision, p. 18; Hu Dec. ¶ 43.) Indeed, like the ’290 patent, Natarajan discloses that “[s]cheduled access multiaccess protocols can be implemented to effectively conserve battery power by suitable control of the state of transmitter and receiver units at the portable units (i.e., by scheduling when they should be turned ON or OFF)...the transmitter (or receiver) consumes power only when it is actively transmitting a message (or actively receiving a message).” (Natarajan, 3:59-4:6.) This type of communication operates in “low duty cycle RF bursts.” (Grimes Dec. ¶ 115; Hu Dec. ¶ 43.)

DSS argues that Natarajan only describes that the mobile units operate in this manner. (POR, p. 16.) But a POSA would have understood that, similarly, when the base station is not transmitting, its transmitter is powered off. (Grimes Dec. ¶¶ 27, 115-116; Grimes Depo. (DSS 2015), 68:5-12, 74:7-19, 75:21-76:3; Hu Dec. ¶ 44.) In Natarajan, “[m]ost users are very likely to be inactive (both Trans-

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