

PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 5,825,898

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

REALTEK SEMICONDUCTOR CORPORATION
Petitioner

v.

ANDREA ELECTRONICS CORPORATION
Patent Owner

Case: IPR2015-01391

Patent 5,825,898

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OF U.S. PATENT NO. 5,825,898**

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A. Ground 1: Claims 1, 3, 4, 9, 11-18, And 20 Are Unpatentable Under 35 U.S.C. § 103(a) As Being Obvious Over Martin Kompis et al., Noise Reduction for Hearing Aids: Combining Directional Microphones with an Adaptive Beamformer, J. Acoust. Soc. Am. 96 (3), September 1994 (“Kompis”) In View Of U.S. Patent No. 5,627,799 to Hoshuyama (“Hoshuyama”)29

B. Ground 2: Claims 5, 7, 8, 21, 22, And 24-28 Are Unpatentable Under 35 U.S.C. § 103(a) As Being Obvious Over Kompis In View Of James M. Kates et al., A Comparison Of Hearing Aid Array-Processing Techniques, J. Acoust. Soc. Am. 99 (5), May 1996 (“Kates”)42

C. Ground 3: Claims 2 And 10 Are Unpatentable Under 35 U.S.C. § 103(a) As Being Obvious Over Kompis In View Of Hoshuyama, And Further In View Of Sven Fischer et al., An Adaptive Microphone Array for Hands-Free Communication, Proc. IWAENC-95, Røros, Norway, June 1995 (“Fischer”)53

D. Ground 4: Claims 6 And 23 Are Unpatentable Under 35 U.S.C. § 103(a) As Being Obvious Over Kompis In View Of Kates, And Further In View Of Fischer56

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PETITIONER'S EXHIBIT LIST

Description	Exhibit #
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<i>Andrea Electronics Corp. v. Lenovo Holding Co. and Lenovo (U.S.) Inc.</i> , Civil Action No. 2:14-cv-04489, Plaintiff's Answer to Defendants Lenovo Holding Company Inc., and Lenovo (United States) Inc.'s Counterclaims, Dkt. No. 45 (E.D.N.Y. Dec. 15, 2014)	1006
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