

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Inventors: Dennis Wayne Cameron, et al.	§	109109-0017-652
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Issue Date: Jun. 22, 1999	§	
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Former Group Art Unit: 2649	§	Inc.; Hewlett Packard
Former Examiner: Thanh Cong Le	§	Enterprise Company; HP Inc.;
	§	ARRIS Group, Inc.; Juniper
	§	Networks, Inc.; Brocade
	§	Communications Systems, Inc.;
	§	Ruckus Wireless Inc.

For: METHOD AND SYSTEM FOR PROVIDING MULTICARRIER
SIMULCAST TRANSMISSION

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**PETITION FOR *INTER PARTES* REVIEW OF
UNITED STATES PATENT NO. 5,915,210**

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LIST OF EXHIBITS

Exhibit	Description
Ex.1001	U.S. Patent No. 5,915,210
Ex.1002	U.S. Patent No. 5,915,210 File History
Ex.1003	Declaration of Anthony Acampora, Ph.D.
Ex.1004	Declaration of Gerard Grenier - J.C. Rault, D. Castelain, and B. Le Floch, <i>The coded orthogonal frequency division multiplexing (COFDM) technique, and its application to digital radio broadcasting towards mobile receivers</i> , in IEEE GLOBAL TELECOMMUNICATIONS CONFERENCE & EXHIBITION 428-432 (Dallas, 1989)
Ex.1005	U.S. Patent No. 4,615,040 (“Mojoli”)
Ex.1006	U.S. Patent No. 5,191,576 (“Pommier”)
Ex.1007	U.S. Patent No. 5,197,061 (“Halbert-Lassalle”)
Ex.1008	U.S. Patent No. 4,660,193 (“Young”)
Ex.1009	German Patent DE 41 024 08 A1 (Certificate of English Translation)
Ex.1010	German Patent DE 41 024 08 A1 (English Translation) (“Saalfrank”)
Ex.1011	German Patent DE 41 024 08 A1 (German)
Ex.1012	Declaration of Gerard Grenier - Yasuhisa Nakamura and Yoichi Saito, <i>256 QAM Modem for Multicarrier 400 Mbit/s Digital Radio</i> , in IEEE JOURNAL ON SELECTED AREAS IN COMMUNICATIONS, Vol. 5, No. 3 329-335 (April 1987)
Ex.1013	Library of Congress Certificate and an Article (Yasuhisa Nakamura and Yoichi Saito, <i>256 QAM Modem for Multicarrier 400 Mbit/s Digital Radio</i>) in IEEE JOURNAL ON SELECTED AREAS IN COMMUNICATIONS, Vol. 5, No. 3 329-335 (April 1987)
Ex.1014	Library of Congress Certificate and an Article (J.C. Rault, D. Castelain, and B. Le Floch, <i>The coded orthogonal frequency division multiplexing (COFDM) technique, and its application to digital radio broadcasting towards mobile receivers</i>) in IEEE GLOBAL TELECOMMUNICATIONS CONFERENCE & EXHIBITION 428-432 (Dallas, 1989)
Ex.1015	Declaration of Marissa Golub
Ex.1016	Declaration of Sharon Lee

Pursuant to §§311-319 and Rule §42,¹ the undersigned, acting in a representative capacity for Petitioners, hereby petition for *inter partes* review of claims 1, 7-8, 10, 15-17, and 19 (“Claims”/“Challenged Claims”) of U.S.P.N. 5,915,210 (“the ’210”), issued to Destineer Corporation and assigned to Mobile Telecommunications Technologies, LLC (“PO”/“Patent Owner”). There is a reasonable likelihood that at least one claim is unpatentable, and Petitioners request judgment against the Claims as unpatentable under §103.

I. INTRODUCTION

The ’210 generally relates to a “two-way communication system” between base transmitters and pagers that “broadcast[s] in simulcast using multi-carrier modulation techniques.” Ex1001, Abstract; Ex1003 ¶¶34. According to the ’210, the use of multi-carrier modulation solves the well-known problem of “intersymbol interference,” which is caused by timing shifts between signals received from simulcast transmitters, and limits the baud rate at which information may be transferred. Ex1001, 2:49-53; *see also id.*, 2:33-49; 2:62-67; 3:26-50; Ex1003 ¶¶35-37. But, the Claims’ supposed “invention” was well-known and obvious long before the asserted November 12, 1992 effective filing date.

The Claims generally recite (1) splitting an information signal into multiple portions such that each of a plurality of carriers “represent[s] a portion of the

¹ Section cites are to 35 U.S.C. or 37 C.F.R., and emphases is added unless noted.

information signal substantially not represented by others” and (2) transmitting the plurality of carriers in simulcast from a first and second transmitter. These features were well-known long before November 1992. Ex1003 ¶37. For example, Rault (Ex1004) (pub’d 1989), discloses a multicarrier system for digital audio broadcasting (“DAB”) and teaches that (1) “the information to be transmitted is split into a large number of modulated carriers,” Ex1004, 8 ¶1, and (2) the carriers are broadcast by a “single-frequency network” “consisting [of] a network of synchronized transmitters working on the same signal.” *Id.*, 10 ¶2. Like the ’210, Rault uses multi-carrier modulation for the express purpose of “suppress[ing] the intersymbol interference due to the frequency selectivity of the channel,” and “demonstrate[s] that the OFDM technique wipes out the intersymbol interference in the multipath channel.” Ex. 1004, 8 ¶¶1, 11. Saalfrank (Ex1010) (pub’d 1992) also teaches these features by disclosing a “high-quality radio transmission” system (1) utilizing “a plurality of individual carriers” for broadcasting “stereo programs” and “data related to or independent from said programs” and (2) employing “common-wave radio operation,” meaning “all transmitter stations simultaneously emit transmission signals with the same modulation content on the very same transmission frequency and/or the same carrier frequencies.” Ex1010, 2 ¶¶3-4. Additional references further confirm these features were well known. *See, e.g.*, Ex1007 (“Lassalle”) (multicarrier COFDM system for “radio broadcasting”)

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