

Patent No. 5,659,891
Petition For *Inter Partes* Review

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Juniper Networks, Inc., Brocade Communications Systems, Inc., and
Ruckus Wireless, Inc.
Petitioner,

v.

MOBILE TELECOMMUNICATIONS TECHNOLOGIES, LLC
Patent Owner.

U.S. Patent No. 5,659,891
Issue Date: August 19, 1997
Title: Multicarrier Techniques In Bandlimited Channels

Inter Partes Review No.: Unassigned

**PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 5,659,891
UNDER 35 U.S.C. §§ 311-319 and 37 C.F.R. §§ 42.1-.80, 42.100-.107**

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Petitioners' Exhibit List

<i>Exhibit #</i>	<i>Exhibit Description</i>
1001	U.S. Patent No. 5,659,891 (“the ’891 Patent”)
1002	’891 Patent File History (“File History”)
1003	Declaration of Petitioners’ Expert Dr. Tim Williams (“Williams”)
1004	List of Pending Civil Actions and IPRs for U.S. Patent Nos. 5,659,891, 5,915,210, 5,590,403
1005	In the Matter of Mobile Telecommunication Technologies Corporation, Petition for Rulemaking, dated November 12, 1991 (“MTel Petition”)
1006	WO 94/11960 (“’960 Publication”)
1007	Dr. Rade Petrovic, et al., Permutation Modulation for Advanced Radio Paging, IEEE Proceedings of SoutheastCon ’93 (Apr. 7, 1993) (“Petrovic”)
1008	U.S. Patent No. 5,414,734
1009	Technical Feasibility Demonstration, dated June 1, 1992 (“MTel Demonstration”)
1010	WO/08355 (“Raith”)
1011	Alakija & S.P. Stapleton, A Mobile Base Station Phased Array Antenna, IEEE INT’L CONF. ON SELECTED TOPICS WIRELESS COMM., June 1992, at 118. (“Alakija”)
1012	MTel v. T-Mobile Claim Construction Order
1013	Excerpts from McGraw-Hill Dictionary of Scientific and Technical Terms, Fifth Edition.
1014	U.S. Patent No. 4,513,443 (“Louttit”)
1015	Arris Group v. MTel, IPR2016-00766, Patent Owner Preliminary Response
1016	FCC Filing Information for MTel Petition
1017	FCC Filing Information for MTel Demonstration

I. INTRODUCTION

Pursuant to 35 U.S.C. § 311 *et seq.* and 37 C.F.R. § 42.1 *et seq.*, Juniper Networks, Inc., Brocade Communications Systems, Inc. and Ruckus Wireless, Inc. (collectively “Petitioners”) hereby petition for an *inter partes* review of U.S. Patent No. 5,659,891 (“the ’891 Patent”). Petitioners submit that Claims 1-5 (the “Challenged Claims”) of the ’891 Patent are unpatentable under 35 U.S.C. § 103 in view of the prior art discussed herein. This Petition demonstrates by a preponderance of the evidence that there is a reasonable likelihood that Petitioners will prevail with respect to at least one of these claims. Accordingly, Petitioners respectfully request that the Board institute an *inter partes* review of the ’891 Patent pursuant to 37 C.F.R. § 42.108.

II. MANDATORY NOTICES UNDER 37 C.F.R. §42.8

A. Real Party-in-Interest (37 C.F.R. § 42.8(b)(1)).

The real-parties in interest for this Petition are Juniper Networks, Inc., Brocade Communications Systems, Inc., and Ruckus Wireless, Inc. Petitioners also identify Hewlett Packard Enterprise Company, HP Inc., Aruba Networks, Inc., and ARRIS Group, Inc. as real-parties in interest at this time.¹

¹ Out of an abundance of caution, Petitioners are identifying and naming Hewlett Packard Enterprise Company, HP Inc., Aruba Networks, Inc., and ARRIS Group,

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