

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent of: Hays *et al.*

U.S. Patent No.: 5,659,891

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Title: MULTICARRIER TECHNIQUES IN BANDLIMITED CHANNELS

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**CORRECTED PETITION FOR *INTER PARTES* REVIEW OF UNITED STATES PATENT NO. 5,659,891**  
**PURSUANT TO 35 U.S.C. §§ 311–319, 37 C.F.R. § 42**

## TABLE OF CONTENTS

<b>I.</b>	<b>MANDATORY NOTICES UNDER 37 C.F.R § 42.8(a)(1)</b> .....	<b>1</b>
A.	Real Party-In-Interest Under 37 C.F.R. § 42.8(b)(1).....	1
B.	Related Matters Under 37 C.F.R. § 42.8(b)(2).....	1
C.	Counsel Under 37 C.F.R. § 42.8(b)(3) and Service Information .....	1
<b>II.</b>	<b>PAYMENT OF FEES – 37 C.F.R. § 42.103</b> .....	<b>2</b>
<b>III.</b>	<b>REQUIREMENTS FOR IPR UNDER 37 C.F.R. §§ 42.104</b> .....	<b>2</b>
A.	Grounds for Standing Under 37 C.F.R. § 42.104(a).....	2
B.	Challenge Under 37 C.F.R. § 42.104(b) and Relief Requested .....	2
C.	Claim Construction under 37 C.F.R. §§ 42.104(b)(3).....	3
1.	“Single mask-defined, bandlimited channel” (Claims 1, 3, and 5) .....	4
2.	“Plurality of Transmitters” (Claim 5).....	5
3.	“Paging” (Claims 1, 3, 5).....	6
<b>IV.</b>	<b>SUMMARY OF THE ‘891 PATENT</b> .....	<b>7</b>
A.	Brief Description.....	7
B.	Summary of the Prosecution History of the ‘891 Patent.....	8
<b>V.</b>	<b>MANNER OF APPLYING CITED PRIOR ART TO EVERY CLAIM FOR WHICH AN IPR IS REQUESTED, THUS ESTABLISHING A REASONABLE LIKELIHOOD THAT AT LEAST ONE CLAIM OF THE ‘891 PATENT IS UNPATENTABLE</b> .....	<b>9</b>
A.	[GROUND 1] – Petrovic Anticipates Claims 1-5 .....	9
1.	Claim 1 .....	16
2.	Claim 2 .....	19
3.	Claim 3 .....	21
4.	Claim 4 .....	24
5.	Claim 5 .....	25
B.	[GROUND 2] – Petrovic in view of Raith and Alakija Renders Claim 5 Obvious .....	28
C.	[GROUND 3] – Cimini Anticipates Claims 1-5 .....	35
1.	Claim 1 .....	39
2.	Claim 2 .....	42
3.	Claim 3 .....	42
4.	Claim 4 .....	45
5.	Claim 5 .....	46
D.	[GROUND 4] – Cimini in view of Raith and Alakija Renders Claim 5 Obvious .....	50
<b>VI.</b>	<b>REDUNDACY</b> .....	<b>57</b>

**VII. CONCLUSION.....57**

## EXHIBITS

- APPLE-1001 U.S. Patent No. 5,659,891 to Hays *et al.* (“the ‘891 patent”)
- APPLE-1002 Excerpts from the Prosecution History of the ‘891 Patent (“the Prosecution History”)
- APPLE-1003 Docket for *Mobile Telecommunications Technologies, LLC v. Apple Inc.*, Case No. 2:13-CV-258 (E.D. Tex.)
- APPLE-1004 Declaration of Dr. Apostolous Kakaes (“Kakaes Declaration”)
- APPLE-1005 Plaintiff’s Opening Brief on Issues of Claim Construction from *Mobile Telecommunications Technologies, LLC v. Apple Inc.*, Civil Action No. 2:13-cv-258-JRG-RSP (E.D. Tex.)
- APPLE-1006 Claim Construction Order from *Mobile Telecommunications Technologies, LLC v. Apple Inc.*, Civil Action No. 2:13-cv-258-JRG-RSP (E.D. Tex.)
- APPLE-1007 Claim Construction Order from *Mobile Telecommunications Technologies, LLC v. Clearwire Corp.*, Civil Action No. 2:12-cv-308-JRG-RSP (E.D. Tex.)
- APPLE-1008 Dr. Rade Petrovic *et al.*, *Permutation Modulation for Advanced Radio Paging*, IEEE Proceedings of Southeastcon '93 (7 Apr 1993) (“Petrovic”)
- APPLE-1009 Leonard J. Cimini, *Analysis and Simulation of a Digital Mobile Channel Using Orthogonal Frequency Division Multiplexing*, 33 IEEE Transactions on Communications 665 (Jul. 1985) (“Cimini”)
- APPLE-1010 WIPO Publication No. 1989/008355 to Raith *et al.* (“Raith”)
- APPLE-1011 C. Alakija and S. P. Stapleton, *A Mobile Base Station Phased Array Antenna*, 1992 IEEE International Conference on Select-

ed Topics in Wireless Communications at 118 (Jun. 1992)  
("Alakija")

APPLE-1012 U.S. Patent No. 5,590,403 to Cameron *et al.* (the '403 Patent)

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