signal at either a base station or subscriber station combined with *Mangal* would merely result in *Mangal*'s base station and subscriber stations filtering received signals without regard to the order of filtering performed at such base station and subscriber stations. The Examiner does not rely on any other reference as satisfying this limitation. As shown, the Examiner's proposed combination fails to satisfy every claim limitation. Therefore, Appellant requests that the Board *reverses* the rejection of record.

Moreover, Appellant asserts that a prima facie case of obviousness has not been established because the Examiner has not provided an objective reason to combine the teachings of the references. The proposed motivation put forth by the Examiner, i.e., cost savings, is merely general incentive, and not an objective reason to combine the references. Therefore, the motivation for the combination is improper. Accordingly, Appellant requests that the Board *reverses* the rejection of record.

Rejections Under 35 U.S.C. 112, paragraph 2

Claims 40, 42-53, 55-71, and 76-77 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Appellant regards as the invention. Specifically, the Final Action indicates independent claims 40, 53, and 66 include the phrases "a first frequency" and "a second frequency" making it unclear because allegedly communication systems typically utilize a spectrum of frequencies for communication. *See* Final Action, pg. 2. Further, dependent claims 22-53, 55-65, and 67-71 stand rejected because they depend from rejected claims 40, 53, and 66. Additionally, claims 76 and 77 are rejected for reciting a limitation with insufficient antecedent basis. The rejection of claim 77 as being unclear as written has been addressed by the Amendment. As Appellant best understands, the Examiner accepts the amendment to claim 77 in the Amendment, rendering the rejection of claim 77 moot.

Independent Claims 40, 53, and 66

The meaning of claims 40, 53, and 66 are discernable and definite when construed under correct principle of claim interpretation, which is that the meaning would be given by one

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possessing the ordinary level of skill in the pertinent art at the time the invention was made. *See Solomon v. Kimberly-Clark Corp.*, 216 F.3d 1372, 1379, 55 USPQ2d 1279, 1283 (Fed. Cir. 2000). If the language of the claim is such that a person of ordinary skill in the art could interpret the metes and bounds of the claim so as to understand how to avoid infringement, a rejection of the claim under 35 U.S.C. 112, second paragraph, would be inappropriate. *See Morton Int'l, Inc. v. Cardinal Chem. Co.*, 5 F.3d 1464, 1470, 28 USPQ2d 1190, 1195 (Fed. Cir. 1993). The fact that the Examiner prefers other language is not a proper basis for maintaining the present indefiniteness rejection. *See In re Swinehart*, 439 F.2d 210, 160 USPQ 226 (CCPA 1971).

It is well understood in the art that transmitting can occur at a desired frequency or frequencies about the desired frequency. There is nothing in the claim language to suggest that Appellant intends to limit transmitting on only the "first" or "second" frequency. That is, the claim language does not require transmitting and receiving on only a "first" frequency. As such, Appellant does not exclude transmitting or receiving of data that occur on frequencies near or about a desired frequency by using the phrase "transmitting . . . data on a first frequency." A person possessing the ordinary level of skill in the pertinent art at the time the invention was made would understand the phrase "transmitting data. . . on a first frequency" to mean transmitting data on or about a first frequency. As such, a person of ordinary skill in the art could interpret the metes and bounds of the claim language "a first frequency" so as to understand how to avoid infringement. Thus, the claims as written are fully definite and discernible to those of skill in the art. The Examiner's preference for the other language is improper in maintaining the indefiniteness rejection. Therefore, Appellant requests that the Board *reverses* the rejection of record.

Support for the language "communication session" of claims 76 and 77 can be found in the specification. As an initial matter, Appellant notes that a claim rejection for lack of support in the specification is more appropriately made under 35 USC 112, first paragraph, rather than the second paragraph. In the discussion of one embodiment, the specification explains that *all* downstream wireless data transmissions occur in a relatively interference-free licensed band *while all* transmissions in the upstream direction take place in a license-free band. *See*

specification, paragraph [0030]. As such, every communication session that occurs in the invention transmits in one frequency band and receives in another frequency band. That is, during a communication session, transmitting of data occurs in a high interference band and receiving of data occurs in a low interference band.

Even if this is not considered direct support, Appellant points out that "a patent application necessarily discloses [a] function, [property,] theory [of operation] or advantage if the application discloses "a device that inherently performs a function or has a property, operates according to a theory or has an advantage, . . . even though [the application] says nothing explicit concerning it." *In re Reynolds*, 443 F.2d 384, 170 USPQ 94 (CCPA 1971) (emphasis added); *see also, In re Smythe*, 480 F. 2d 1376, 178 USPQ 279 (CCPA 1973). The disclosure that *all* downstream wireless data transmissions occur in one band *while all* transmissions in the upstream direction take place in another band shows that the property or function that transmitting data on a high interference frequency band and receiving data on a low interference band, both occurring in the same session, is inherently performed in the specification. Because the specification clearly discloses the claimed limitation, or alternatively discloses a system that inherently performs this function, claims 76 and 77 contain subject matter that is sufficiently supported by the specification as originally filed. Therefore, Appellant requests that the Board *reverses* the rejection of record.

VIII. CLAIMS APPENDIX

A copy of the claims involved in the present Appeal is attached hereto in the Claims Appendix.

IX. EVIDENCE APPENDIX

No evidence pursuant to 37 C.F.R. §§ 1.130, 1.131, or 1.132 or entered by or relied upon by the Examiner is being submitted.

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X. RELATED PROCEEDINGS

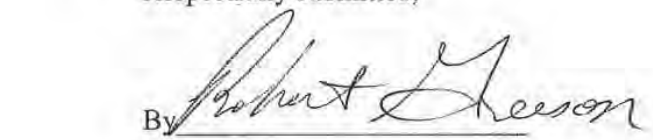
No related proceedings are referenced in II. above, hence copies of decisions in related proceedings are not provided.

XI. CONCLUSION

Appellant submits fees in the amount of $515.00. Please charge any additional fees required or credit any overpayment to Deposit Account No. 06-2380 under Order No. 68144/P009US/10501230 during the pendency of this Application pursuant to 37 CFR 1.16 through 1.21 inclusive, and any other sections in Title 37 of the Code of Federal Regulations that may regulate fees.

Dated: July 6, 2009

Respectfully submitted,

By 

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I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted via the U. S. Patent and Trademark Office electronic filing system in accordance with § 1.6(a)(4).

By:
Linda L. Gibson

Date of Transmission: July 6, 2009

CLAIMS APPENDIX

Claims Involved in the Appeal of Application Serial No. 10/095,307

24. A system for spectrum allocation in wireless data communication comprising:

a first data communications station transmitting data on a first frequency in a first band of operation and receiving data on a second frequency in a second band of operation; and

at least one other data communications station transmitting data on said second frequency in said second band of operation and receiving data on said first frequency in said first band of operation;

wherein one of said frequencies is in a licensed band and another of said frequencies is an unlicensed band, wherein said first station is a hub station and said at least one other data communications station is at least one subscriber station, wherein said hub station comprises at least one dual band antenna transmitting on said first frequency using a first antenna beam and receiving on said second frequency using a second antenna beam, wherein said subscriber stations comprise at least one dual band antenna receiving on said first frequency using a first antenna beam and transmitting on said second frequency using a second antenna beam, wherein said hub station first antenna beam and said subscriber station first antenna beam have co-spatial footprints and said hub station second antenna beam and said subscriber station second antenna beam have co-spatial footprints.

40. A method for increasing capacity of a wireless data communication system, said method comprising the steps of:

receiving, at a subscriber station, data on a first frequency in a frequency band expected to experience low interference;

transmitting, at said subscriber station, data on a second frequency in a frequency band expected to experience high interference,

wherein said low interference frequency band and said high interference frequency are separated by at least one octave; and

wherein at least a portion of said receiving and at least a portion of said transmitting occur at the same time.

42. The method of claim 40 wherein said data is frequency division duplexed.

43. The method of claim 40 further comprising:

receiving, at a base station, data on said second frequency in said interference frequency band expected to experience high interference;

transmitting, at said base station, data on said first frequency in said frequency band expected to experience low interference;

wherein said first frequency and said second frequency are separated by at least one octave.

44. The method of claim 43 wherein at least a portion of said receiving at a base station and at least a portion of said transmitting at a base station occur at the same time.

45. The method of claim 43 wherein said data is frequency division duplexed.

46. The method of claim 43 wherein said base station performs higher order filtering on signals received at said base station than said subscriber station performs on signals received at said subscriber station.

47. The method of claim 46 wherein the filtering performed at said base station is performed by a multi-pole filter.

48. The method of claim 46 wherein said subscriber station performs lower order filtering on signals received at said subscriber station than said base station performs on signals received at said base station.

49. The method of claim 48 wherein the filtering performed at said subscriber station is performed by finite impulse response (FIR) filtering.

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50. The method of claim 48 wherein the filtering performed at said subscriber station is performed by surface acoustical wave (SAW) filtering.

51. The method of claim 40 wherein said interference frequency band expected to experience low interference is determined to be low interference and said interference frequency band expected to experience high interference is determined to be high interference according to regulation of each of said frequency bands by a governmental entity.

52. The method of claim 51 wherein said governmental entity is the FCC.

53. A method for increasing capacity of a wireless data communication system, said method comprising the steps of:

transmitting, at a base station, data on a first frequency in a frequency band expected to experience low interference;

receiving, at said base station, data on a second frequency in a frequency band expected to experience high interference;

wherein said first frequency and said second frequency are separated by at least one octave; and

wherein at least a portion of said receiving and at least a portion of said transmitting occur at the same time.

55. The method of claim 53 wherein said data is frequency division duplexed.

56. The method of claim 53 further comprising:

receiving, at a subscriber station, data on said first frequency in said frequency band expected to experience low interference;

transmitting, at said subscriber station, data on said second frequency in said frequency band expected to experience high interference;

wherein said first frequency and said second frequency are separated by at least one octave.

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57. The method of claim 56 wherein at least a portion of said receiving at a subscriber station and at least a portion of said transmitting at a subscriber station occur at the same time.

58. The method of claim 56 wherein said data is frequency division duplexed.

59. The method of claim 56 wherein said base station performs higher order filtering on signals received at said base station than said subscriber station performs on signals received at said subscriber station.

60. The method of claim 59 wherein the filtering performed at said base station is performed by a multi-pole filter.

61. The method of claim 59 wherein said subscriber station performs lower order filtering on signals received at said subscriber station than said base station performs on signals received at said base station.

62. The method of claim 61 wherein the filtering performed at said subscriber station is performed by finite impulse response (FIR) filtering.

63. The method of claim 60 wherein the filtering performed at said subscriber station is performed by surface acoustical wave (SAW) filtering.

64. The method of claim 53 wherein said frequency band is determined to be low interference and said frequency band expected to experience high interference is determined to be high interference according to regulation of each of said frequency bands by a governmental entity.

65. The method of claim 64 wherein said governmental entity is the FCC.

66. A method for increasing wireless communication capacity, said method comprising:

providing a base station, said base station adapted to transmit data in an expected low noise frequency band and to receive data in an expected high noise frequency band; and

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providing a plurality of subscriber stations, said plurality of subscriber stations adapted to transmit data in said expected high noise frequency band and to receive data in said expected low noise frequency band;

wherein said base station performs higher order filtering on signals received at said base station than said plurality of subscriber station perform on signals received at said plurality of subscriber stations.

67. The method of claim 66 wherein the filtering performed at said base station is performed by a multi-pole filter.

68. The method of claim 66 wherein the filter performed at said subscriber station is performed by finite impulse response (FIR) filtering.

69. The method of claim 66 wherein the filter performed at said subscriber station is performed by surface acoustical wave (SAW) filtering.

70. The method of claim 66 wherein said low noise frequency and said high noise frequency band are separated by at least one octave.

71. The method of claim 66 wherein said data is frequency division duplexed.

72. A wireless communication system, said system comprising:

at least one subscriber station, said at least one subscriber station comprising:

a multi-band antenna, said multi-band antenna employing more than one polarity in each band of operation; and

a multi-band duplexer, said multi-band duplexer operating in a first frequency band a second frequency band, where said first frequency band and said second frequency band are separated by at least on octave.

73. The wireless communication system of claim 72 wherein said multi-band duplexer comprises a waveguide assembly.

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74. The wireless communication system of claim 72 wherein said multi-band antenna substantially matches the antenna pattern of the uplink and downlink.

75. The wireless communication system of claim 73 wherein said waveguide assembly comprises a first waveguide component and second waveguide component, where the waveguide of said first waveguide component is approximately twice as large as the waveguide of said second waveguide component.

76. A method for increasing capacity of a wireless data communication system, said method comprising the steps of:

receiving, at a subscriber station, data on a first frequency in a frequency band expected to experience low interference;

transmitting, at said subscriber station, data on a second frequency in a frequency band expected to experience high interference;

wherein said low interference frequency band and said high interference frequency band are separated by at least one octave; and

wherein said transmitting and said receiving occur during the same communication session.

77. A method for increasing capacity of a wireless data communication system, said method comprising the steps of:

transmitting, at a base station, data on a first frequency in a first frequency band expected to experience low interference;

receiving, at said base station, data on a second frequency in a second frequency band expected to experience high interference;

wherein said first frequency and said second frequency are separated by at least one octave; and

wherein said transmitting and said receiving occur during the same communication session.

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EVIDENCE APPENDIX

No evidence pursuant to 37 C.F.R. §§ 1.130, 1.131, or 1.132, or entered by or relied upon by the Examiner, is being submitted.

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RELATE PROCEEDINGS APPENDIX

No related proceedings are referenced in II. above. As such, no decisions in related proceedings are provided herein.

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Electronic Patent Application Fee Transmittal

Application Number:	10095307
Filing Date:	11-Mar-2002
Title of Invention:	Spectrum allocation system and method for multi-band wireless RF data communications
First Named Inventor/Applicant Name:	Randy J. Karr
Filer:	David H. Tannenbaum/Linda Gibson
Attorney Docket Number:	68144/P009US/10501230
Filed as Small Entity	

Utility under 35 USC 111(a) Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Filing a brief in support of an appeal	2402	1	270	270
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension - 2 months with $0 paid	2252	1	245	245
Miscellaneous:				
			Total in USD ($)	**515**

Electronic Acknowledgement Receipt

EFS ID:	5648928
Application Number:	10095307
International Application Number:	
Confirmation Number:	3972
Title of Invention:	Spectrum allocation system and method for multi-band wireless RF data communications
First Named Inventor/Applicant Name:	Randy J. Karr
Customer Number:	29053
Filer:	David H. Tannenbaum/Linda Gibson
Filer Authorized By:	David H. Tannenbaum
Attorney Docket Number:	68144/P009US/10501230
Receipt Date:	06-JUL-2009
Filing Date:	11-MAR-2002
Time Stamp:	17:05:29
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	$515
RAM confirmation Number	3565
Deposit Account	
Authorized User	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)

1		10095307apl.pdf	1425332 64b75c0e983319ed10cd21c55247645a9b21d14a	yes	30
	Multipart Description/PDF files in .zip description				
	Document Description		**Start**	**End**	
	Miscellaneous Incoming Letter		1	1	
	Extension of Time		2	2	
	Appeal Brief Filed		3	30	
Warnings:					
Information:					
2	Fee Worksheet (PTO-875)	fee-info.pdf	32003 9fe5c528f2fad682c8c106a761c1780feaf665b4	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	1457335		

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New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

TRANSMITTAL OF APPEAL BRIEF

Docket No.
68144/P009US/10501230

In re Application of: Randy J. Karr et al.

Application No.	Filing Date	Examiner	Group Art Unit
10/095,307-Conf. #3972	March 11, 2002	D. Levitan	2416

Invention: SPECTRUM ALLOCATION SYSTEM AND METHOD FOR MULTI-BAND WIRELESS RF DATA COMMUNICATIONS

TO THE COMMISSIONER OF PATENTS:

Transmitted herewith is the Appeal Brief in this application, with respect to the Notice of Appeal filed: March 6, 2009

The fee for filing this Appeal Brief is $ 270.00

[ ] Large Entity [x] Small Entity

[x] A petition for extension of time is also enclosed.

The fee for the extension of time is $245.00

[ ] A check in the amount of _____ is enclosed.

[ ] Charge the amount of the fee to Deposit Account No. 06-2380

[x] Payment by credit card.

[x] Appellant submits fees in the amount of $515.00 by credit card. Please charge any additional fees required or credit any overpayment to Deposit Account No. 06-2380 under Order No. 68144/P009US/10501230 during the pendency of this Application pursuant to 37 CFR 1.16 through 1.21 inclusive, and any other sections in Title 37 of the Code of Federal Regulations that may regulate fees.

Dated: July 6, 2009

Robert L Greeson
Attorney Reg. No. : 52,966
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(214) 855-7430

Transmittal of Appeal Brief

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Dated: July 6, 2009 Signature: _____ (Linda L. Gibson)

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PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a) FY 2009 *(Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).)*	Docket Number (Optional) 68144/P009US/10501230
Application Number 10/095,307-Conf. #3972	Filed March 11, 2002
For SPECTRUM ALLOCATION SYSTEM AND METHOD FOR MULTI-BAND WIRELESS RF DATA COMMUNICATIONS	
Art Unit 2416	Examiner D. Levitan

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above identified application.

The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):

		Fee	Small Entity Fee	
[ ]	One month (37 CFR 1.17(a)(1))	$130	$65	$
[X]	Two months (37 CFR 1.17(a)(2))	$490	$245	$ $245.00
[ ]	Three months (37 CFR 1.17(a)(3))	$1110	$555	$
[ ]	Four months (37 CFR 1.17(a)(4))	$1730	$865	$
[ ]	Five months (37 CFR 1.17(a)(5))	$2350	$1175	$

[X] Applicant claims small entity status. See 37 CFR 1.27.

[ ] A check in the amount of the fee is enclosed.

[X] Payment by credit card.

[ ] The Director has already been authorized to charge fees in this application to a Deposit Account.

[X] Please charge any additional fees required or credit any overpayment to Deposit Account 06-2380, under Order No. 68144/P009US/10501230 during the pendency of this Application pursuant to 37 CFR 1.16 through 1.21 inclusive, and any other sections in Title 37 of the Code of Federal Regulations that may regulate fees.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

I am the

[ ] applicant/inventor.

[ ] assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).

[X] attorney or agent of record. Registration Number 52,966

[ ] attorney or agent under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____

Robert L Greeson
Signature

July 6, 2009
Date

Robert L Greeson
Typed or printed name

(214) 855-7430
Telephone Number

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

[ ] Total of 1 forms are submitted.

Two (2) Month Request for Extension of Time

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted via the Office electronic filing system in accordance with § 1.6(a)(4).

Dated: July 6, 2009 Signature: Linda L Gibson (Linda L. Gibson)

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/095,307	03/11/2002	Randy J. Karr	68144/P009US/10501230	3972

29053 7590 09/24/2009

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EXAMINER	
LEVITAN, DMITRY	
ART UNIT	PAPER NUMBER
2416	

MAIL DATE	DELIVERY MODE
09/24/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/095,307
Filing Date: March 11, 2002
Appellant(s): KARR ET AL.

Robert L. Greeson
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 7/07/09 appealing from the Office action mailed 10/06/08.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

BPAI Decision of February 25, 2008 on appeal of the current application.

The BPAI decision introduced new grounds of rejection for claims, directed to bi-directional transmissions in first and second frequency bands, wherein the claims were found to be anticipated by Mangal reference (US 6,801,519).

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

A substantially correct copy of appealed claims appears on pages 21-26 of the Appendix to the appellant's brief.

The minor errors are as follows: Claims 24 and 72-75 should be marked as withdrawn, as indicated in the status of the claims section and claims 1-23, 25-39, 41 and 54 should be marked as cancelled.

(8) Evidence Relied Upon

6,801,519	MANGAL	10-2004

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

1. Claims 40, 42-53, 55-71, 76 and 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mangal (US 6,801,519) in view of Admitted Prior Art (Current application, Background, pages 1-5).

2. Regarding claims 40, 43, 51-53, 56, 64, 65, 76 and 77, Mangal substantially teaches the limitations of the claims:

A method for increasing capacity of a wireless data communication system (communication wireless system operating in two bands, one licensed and other unlicensed, to connect a base station 109 and a subscriber station 100, as shown on Fig. 1 and disclosed on 4:6-26), said method comprising the steps of:

receiving, at a subscriber station, data on a first frequency, transmitted from the base station, in a frequency band expected to experience low quality of service (selecting a receiving band for the subscriber station, based on the quality needs for the service, as disclosed on 6:1-46, which is received at the subscriber station and could be low, as disclosed on 7:34-55);

transmitting, at said subscriber station to the base station, data on a second frequency in a frequency band expected to experience high quality of service (selecting a transmitting band for the subscriber station based on the quality needs for the service, which is transmitted from the subscriber station, as disclosed on 6:1-46, and could be high, as disclosed on 7:34-55),

wherein at least a portion of said receiving and at least a portion of said transmitting occur at the same time/same session (providing communication service, using the same MAC control frame, as shown on Fig. 2 and 5:24-30, utilizing licensed and unlicensed frequency bands, inherently performing receiving and transmitting operation almost at the same time, because almost simultaneous bi-directional communication is essential for the system operation with real-time services, like telephony, as disclosed on 2:1-29, and web browsing, as disclosed on 1:25-32, wherein a subscriber 100 interchange of information from com devices 105-107 with base station 109 is a communication session, as shown on Fig. 1).

In addition, Mangal teaches one of the frequency band as a licensed from FCC and the other frequency band as un-licensed by FCC, as disclosed on 1:44-67, and using the method for

one way communications, as disclosed on 9:19-23.

Mangal does not teach interference as quality characteristics and the bands separated by at least one octave.

Official notice is taken that using interference as quality characteristic is well known and expected in the art.

Admitted Prior Art teaches using licensed and unlicensed bands separated by at least one octave, as disclosed on pages 4 and 5.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add using licensed and unlicensed bands separated by at least one octave of Admitted Prior Art and use of interference and noise as a quality measurement to the system of Mangal to improve the system operation by separating the transmit and receive frequencies by an octave to reduce their interference and utilize well-known quality parameter as interference to provide appropriate quality level of communications in the system.

3. Claim 66 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mangal (US 6,801,519) in view of Admitted Prior Art (Current application, Background, pages 1-5).

Mangal substantially teaches the limitations of the claims:

A method for increasing capacity of a wireless data communication system (communication wireless system operating in two bands, one licensed and other unlicensed, to connect a base station 109 and a subscriber station 100, as shown on Fig. 1 and disclosed on 4:6-26), said method comprising the steps of:

receiving, at a subscriber station, data on a first frequency in a low quality frequency band (selecting a receiving band for the subscriber station based on the quality needs for the

service, as disclosed on 6:1-46, which is received at the subscriber station and could be low, as disclosed on 7:34-55);

transmitting, at said subscriber station, data on a second frequency in a high quality frequency band (selecting a transmitting band for the subscriber station based on the quality needs for the service, which is transmitted from the subscriber station, as disclosed on 6:1-46, and could be high, as disclosed on 7:34-55).

In addition, Mangal teaches one of the frequency band as a licensed from FCC and the other frequency band as un-licensed by FCC, as disclosed on 1:44-67, and using the method for one way communications, as disclosed on 9:19-23.

Mangal does not teach noise as quality characteristic, using a plurality of stations and performing higher order filtering at the base station than the subscriber stations.

Official notice is taken that using noise as quality characteristic is well known and expected in the art.

Admitted Prior Art teaches using point-to-multipoint systems for radio communication systems, as disclosed on page 2, and filtering a received signal at a hub/base station or subscriber stations, as disclosed on page 3.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add using point-to-multipoint systems and performing filtering for the received signals of Admitted Prior Art and use of noise as a quality measurement to the system of Mangal to improve the system operation by providing service to multiple users at different locations by utilizing a point-to-multipoint system, reduce the system cost by using a single higher order filter

at hub/base in comparison with multiple filters at subscriber stations and utilize well-known quality parameters as noise to provide appropriate quality level of communications in the system.

4. Regarding claims 44 and 57, Mangal teaches performing receiving and transmitting operation almost at the same time, as the transmission link and the receive link belong to the same MAC layer and are capable to support such bidirectional communications, requiring almost simultaneous transmit and receive operations, like telephony and web browsing.

5. Regarding claims 42, 45, 55, 58 and 71, Admitted prior art teaches using of frequency division duplexing (FDD), as disclosed on page 2.

6. Regarding claim 70, Admitted Prior Art teaches using licensed and unlicensed bands separated by at least one octave, as disclosed on pages 4 and 5.

7. Claims 46, 48, 59 and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mangal in view of Admitted Prior Art.

Mangal in view of Admitted Prior Art substantially teaches the limitations of the claims (see the parent claims rejection above).

Mangal in view of Admitted Prior Art does not teach performing higher order filtering on the base station in comparison with the lower order filtering at subscriber stations.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add performing higher order filtering on the base station in comparison with the subscriber stations to the system of Mangal in view of Admitted Prior Art to improve the system cost by using a single higher order filter at hub/base in comparison with multiple filters at subscriber stations.

8. Claims 47, 49, 50, 60, 62, 63 and 67-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mangal in view of Admitted Prior Art.

Mangal in view of Admitted Prior Art substantially teaches the limitations of the claims (see the parent claims rejection above), including filtering at base and subscriber stations.

Mangal in view of Admitted Prior Art does not teach using multi-pole, FIR and SAW filters.

Official notice is taken that multi-pole, FIR and SAW filters are well known in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add multi-pole filters to the system of Mangal in view of Admitted Prior Art to utilize well-known filtering methods in the system.

(10) Response to Argument

On page 7 of the Brief, Appellant argues that Mangal subscriber unit system 100 of Fig. 1 cannot be reasonably construed as subscribing to anything.

Examiner respectfully disagrees.

Mangal system, comprising a wireless subscriber unit system 100 interconnected with multiple communication devices 105-107, teaches a subscriber system, similar to the system, disclosed on page 6 (or [0013]) of the current application, wherein a wireless system enables a campus building to access Internet service, a campus building inherently comprises numerous communication devices connected to the wireless system, because a campus building is known to be used by numerous subscribers/students with numerous and diverse communication devices.

Examiner does not see transmitting and receiving information in video, voice or data

format of Mangal, as a contradiction to operation of subscriber services. A single person or a group can subscribe to multiple services and utilize different communication devices for voice, video or data exchange. For example, a computer can be connected to a FAX machine, voice telephone and a video camera to transmit and receive corresponding applications

On pages 8-10 of the Brief, Appellant argues that Mangal subscriber station operates only on one of a low interference band or a high interference band at a time.

Examiner respectfully disagrees.

Mangal clearly teaches use of two pairs of X-ceivers 102-110 to enable simultaneous communication in licensed and unlicensed bands as shown On Fig. 2, wherein a single MAC control frame comprises Licensed and unlicensed sub bands 201 and 202.

Applicant's arguments directed to selection of a licensed or unlicensed band for communication are wrong, because the selection process of Mangal on 4:44-63 is directed to preliminary assignment of applications, like telephony, internet applications or video, to a corresponding quality of service communication link slot, as described on 2:1-29, for communication on the same MAC frame of Fig. 2.

Applicant's arguments, directed to a tearing down a virtual connection, are irrelevant, as the MAC control frame comprise multiple slots in licensed and unlicensed sub frames and disconnection of a slot communication, or a communication device, does not indicate end of the communication between the subscriber unit system 100 and base station system 109.

On pages 10 and 11 of the Brief, Appellant argues that Mangal does not teach high order filtering and the Official Notice, taken by Examiner in Non-Final Office action of 5/13/08, should recite a reference in support.

Examiner respectfully disagrees.

Appellant had not challenged the Official Notice, taken by Examiner in the non Final Office Action of 5/13/08, in his following Reply. Therefore, the presentation of references to substantiate the Official Notice was not deemed necessary. The examiner's taking of Official Notice has been maintained.

Appellant request for a reference to support the Official Notice is untimely.

In addition, The Supreme Court opinion in KSR case (04-1350, U.S. Apr. 30, 2007), rejected the rigid application of the test, requiring "teaching, suggesting or motivation" in the prior art which would lead one of the ordinary skills in the art to combine the prior art teachings. In current case, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Mangal by using a single higher order filter at hub/base in comparison with multiple filters at subscriber stations to reduce cost of the system. Therefore, using known techniques to improve prior art yields predictable results.

On page 12 of the Brief, Appellant repeats his argument regarding that Mangal subscriber unit system 100 of Fig. 1 cannot be reasonably construed as subscribing to anything, which has been addressed above.

In addition, a communication session is a broad term and can be used for a communication session between a subscriber unit and data base or a session between a communication unit and the data base.

On pages 13-16 of the Brief, Appellant repeats his argument regarding that Mangal subscriber station operates only on one of a low interference band or a high interference band at a time. These arguments have been addressed above.

In addition, Appellant arguments on page 14, directed to tearing down of the communication session of a communication device, directly contradict Mangal teaching of the system operation using MAC control frame format, as shown on Fig. 2 and described on 5:24-67.

On pages 16 and 17 of the Brief, Appellant argues that using high order/more complicated and expensive filtering at a base station in comparison with filters at multiple users' station is a patentable feature.

Examiner respectfully disagrees.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add using point-to-multipoint systems and performing filtering for the received signals of Admitted Prior Art and use of noise as a quality measurement to the system of Mangal to improve the system operation by providing service to multiple users at different locations by utilizing a point-to-multipoint system, reduce the system cost by using a single higher order filter at hub/base in comparison with multiple filters at subscriber stations and utilize well-known quality parameters as noise to provide appropriate quality level of communications in the system.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Dmitry Levitan/

Primary Examiner, Art Unit 2416

Conferees:

Huy Vu

/Huy D Vu/

Supervisory Patent Examiner, Art Unit 2416

/Ricky Ngo/

Supervisory Patent Examiner, Art Unit 2416

Renewed Request for Oral Hearing
I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted via the Office electronic filing system in accordance with § 1.6(a)(4).

Dated: October 5, 2009 Signature: Carol Martin
(Carol Martin)

Docket No.: 68144/P009US/10501230
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Randy J. Karr et al.

Application No.: 10/095,307 Confirmation No.: 3972

Filed: March 11, 2002 Art Unit: 2616

For: SPECTRUM ALLOCATION SYSTEM AND METHOD FOR MULTI-BAND WIRELESS RF DATA COMMUNICATIONS Examiner: D. Levitan

RENEWED REQUEST FOR ORAL HEARING

MS Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Commissioner:

To ensure Appellant's request is timely, Appellant hereby renews its Request for Oral Hearing since receiving the Examiner's Answer mailed on September 24, 2009. Appellant originally requested an Oral Hearing on March 6, 2009, i.e., before the date of Examiner's Answer.

The amount of $540.00 covering the fee set forth in 37 CFR 41.20(b)(3) was previously paid by credit card on March 6, 2009. Although no fee is believed to be due, the Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application

by this firm) to our Deposit Account No. 06-2380, under Order No. 68144/P009US/10501230.

Dated: October 5, 2009

Respectfully submitted,

By /Robert L Greeson/

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Electronic Acknowledgement Receipt

EFS ID:	6205159
Application Number:	10095307
International Application Number:	
Confirmation Number:	3972
Title of Invention:	Spectrum allocation system and method for multi-band wireless RF data communications
First Named Inventor/Applicant Name:	Randy J. Karr
Customer Number:	29053
Filer:	Robert L. Greeson/Carol Martin
Filer Authorized By:	Robert L. Greeson
Attorney Docket Number:	68144/P009US/10501230
Receipt Date:	05-OCT-2009
Filing Date:	11-MAR-2002
Time Stamp:	18:09:36
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Request for Oral Hearing	P009USRewenedReq4OH.pdf	51411 85786e5ff2259160c9c6c870bc26994f935e47a	no	2

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New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

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APPEAL CENTER RETURN

Application Number:	10095307	Date:	02-Oct-2009
Examiner:	DMITRY, LEVITAN	GAU:	2416

Appeal Document(s) that caused this Return:

- ☐ IDS not considered
- ☐ Amendments not entered/considered
- ☐ Reply Brief not considered
- ☐ Appeal Brief not considered
- ☐ Appeal Brief claims not consistent w/amendment
- ☐ Reference not scanned into IFW
- ☐ Examiner's Answer omitted claims from the Grounds of Rejection
- ☐ No Appeal Conference Held
- ☐ Other

One or more of the following items are missing:

- ☐ Translation
- ☐ Affidavits
- ☐ Declaration
- ☐ Artifacts
- ☑ Reference from Evidence Relied Upon section
- ☐ Conference Initials (three)
- ☐ Headings
- ☐ New Ground of Rejection - TC Director Signature needed
- ☐ Other

When the correction has been made, please create an E-Dan message for the "AppealSpecial Processing" mailbox with "COMPLETE" in the text.
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Evidence relied upon must list the admitted prior art cited in the grounds of rejection, this can be done on a PTO-90c---Tracey x 21644

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/095,307	03/11/2002	Randy J. Karr	68144/P009US/10501230	3972

29053 7590 10/08/2009

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EXAMINER	
ART UNIT	PAPER NUMBER

DATE MAILED: 10/08/2009

Please find below and/or attached an Office communication concerning this application or proceeding.

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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
10095307	3/11/02	KARR ET AL.	68144/P009US/10501230

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EXAMINER	
Dmitry H.. Levitan	
ART UNIT	**PAPER**
2461	20091006

DATE MAILED:

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Commissioner for Patents

Evidence Relied Upon section has been amended to add Admitted Prior Art, Current Applicantion, Background section, pages 1-5.

/Dmitry H. Levitan/
Primary Examiner, Art Unit 2461

PTO-90C (Rev.04-03)

Reply Brief
I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted via the Office electronic filing system in accordance with § 1.6(a)(4).
Dated: November 24, 2009 Signature: Carol Martin
(Carol Martin)

Docket No.: 68144/P009US/10501230
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Randy J. Karr et al.

Application No.: 10/095,307

Confirmation No.: 3972

Filed: March 11, 2002

Art Unit: 2616

For: SPECTRUM ALLOCATION SYSTEM AND METHOD FOR MULTI-BAND WIRELESS RF DATA COMMUNICATIONS

Examiner: D. Levitan

REPLY BRIEF

MS Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Commissioner:

As required under 37 C.F.R. § 41.41(a)(1), this Reply Brief is filed within two months of the Examiner's Answer dated September 24, 2009, and is in furtherance of the Appeal Brief filed on July 6, 2009.

No fee is required for this REPLY BRIEF.

This Brief contains items under the following headings as required by M.P.E.P. § 1208:

I. Status of Claims
II. Grounds of Rejection to be Reviewed on Appeal
III. Argument
IV. Conclusion

I. STATUS OF CLAIMS

A. Total Number of Claims in Application

There are 32 claims pending in the application.

B. Current Status of Claims

1. Claims canceled: 1-23, 25-39, 41, and 54;
2. Claims withdrawn from consideration but not canceled: 24 and 72-75;
3. Claims pending: 40, 42-53, 55-71, and 76-77;
4. Claims allowed: None;
5. Claims rejected: 40, 42-53, 55-71, and 76-77; and
6. Claims on Appeal: 40, 42-53, 55-71, and 76-77.

II. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The grounds of rejection to be reviewed remain as identified in the Appeal Brief submitted July 6, 2009, which are as follows:

A. Claims 40, 42-53, 55-71, and 76-77 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,801,519 to Mangal (hereinafter "*Mangal*") in view of Appellant's alleged Admitted Prior Art (hereinafter "AAPA").

B. Claims 40, 42-53, 55-71, and 76-77 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter of the invention.

III. ARGUMENT

Appellant notes that Appellee has substantially maintained the reasoning set forth in past actions, which have already been addressed by the Appeal Brief. As such, for the sake of brevity the arguments in this Reply Brief address only specific, new assertions and issues raised by the Examiner's Answer.

A. First Ground of Rejection

Claims 40, 42-53, 55-71, and 76-77 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Mangal* in view of AAPA. Initially, Appellant would like to apologize for not including, in the Related Appeals and Interferences section, the BPAI decision of February 25, 2008 relating to the current application. Appellant respectfully notes that the new grounds of rejection introduced in the Board's decision found *Mangal* anticipates only claim 1, and not "claims" as asserted by the Examiner's Answer. Appellant also respectfully notes that claims 1-23, 25-39, 41 and 54 are not included in the Claims Appendix, and thus there is no need to indicate them as cancelled, contrary to the suggestion by the Examiner's Answer.

1. Appellee has not shown the proper interpretation of *Mangal*'s subscriber unit system 100 with respect to the claims.

Independent claim 40 recites "wherein at least a portion of said receiving [in a low interference frequency band] and at least a portion of said transmitting [in a high interference frequency band] occur at the same time." Independent claim 53 recites a similar limitation. Independent claim 76 recites "wherein said transmitting [in a low interference frequency band] and said receiving [in a high interference frequency band] occur during the same communication session." Claim 77 recites a similar limitation.

In the Appeal Brief, Appellant stated that *Mangal*'s system 100 cannot reasonably be construed as the claimed "subscriber station" because it does not subscribe to anything, but instead *Mangal*'s system 100 merely manages the data exchange between communication devices 105, 106, and 107 and network system 113. *See* Appeal Brief, pgs. 7 and 12. In response, Appellee disagrees with Appellant but does not provide reasons supporting Appellee's assessment that *Mangal*'s system 100 should be construed to read on the recited "subscriber station." Rather, Appellee simply states that *Mangal*'s system, comprising wireless subscriber unit system 100 connected with communication devices 105-107, is similar to an embodiment of the claimed invention described in the Brief Summary of the Invention of the current application. *See* Examiner's Answer, pgs. 8 and 10. Appellee's statement simply does not address Appellant's assertion that equating *Mangal*'s subscriber unit system 100 with the claimed

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"subscriber station" is an overreaching attempt to construe *Mangal*'s teachings to satisfy the pending claims. Appellant acknowledges that *Mangal* uses the word "subscriber" to denote its system 100. Nevertheless, *Mangal*'s system 100 is **not** described as performing any functions that would justify its interpretation as the claimed "subscriber station." Mistakenly, Appellee equates *Mangal*'s system to an example described in the pending application (albeit incorrectly) rather than comparing *Mangal* to the pending claims.

Further, Appellee states that *Mangal*'s transmitting and receiving information in video, voice or data format is not a contradiction to operation of subscriber services. *See* Examiner's Answer, pgs. 8-9. However, Appellant neither asserts nor contends that transmitting and receiving information in video, voice or data format contradicts the operation of subscriber services. Rather, as set forth in the Appeal Brief, Appellant maintains that if *Mangal* discloses the claimed "subscriber station," only its communication devices 105, 106, and 107 could reasonably be interpreted as the recited "subscriber stations" because only devices 105-107 perform the functions of a "subscriber station." *See Mangal* at Fig. 1 and col. 3, lines 37-43. That is, communication devices 105-107 are disclosed as any devices that transfer or receive information such as voice, data or video. *See id.* Therefore, those devices could reasonably be construed as "subscribing" to a network service, and clearly, such subscribing, e.g., transferring or receiving information in voice, data or video format, is not contradictory to the operation of subscriber services. This is in contrast to *Mangal*'s system 100, which performs functions **not** associated with a subscriber station. Consequently, this is important because *Mangal*'s devices 105-107 (properly construed as a "subscriber station") do not satisfy the claims.

2. Appellee has not shown the references disclose communications in both low interference and high interference frequency bands occurring at the same time or occurring in the same communication session.

As set forth above, independent claims 40 and 53 recite similar limitations of receiving in a low interference frequency band and transmitting in a high interference frequency band, both occurring at the same time. In the Appeal Brief, Appellant stated that *Mangal* discusses bidirectional communications between its devices, e.g., 105, and network system 113 taking

place entirely in only **one** of a licensed sub band or an unlicensed sub band, regardless of the interpretation of *Mangal*'s subscriber unit system 100. *See, e.g.,* Appeal Brief, pgs. 8-9. In response, Appellee contends that Figure 2 of *Mangal*, which shows a single MAC control frame, comprises licensed and unlicensed sub bands, is evidence that *Mangal* describes simultaneous communication in licensed and unlicensed sub bands. *See* Examiner's Answer, pg. 9. Appellee's reliance on *Mangal*'s Figure 2, however, is misplaced. *Mangal*'s Figure 2 showing its single MAC control frame comprising licensed and unlicensed sub bands merely illustrates that **either** a licensed **or** unlicensed sub band could be available to service communications between its devices 105-107 and network system 113. The selection of the sub band depends on the quality of the communication service the particular device requires. *See, e.g., Mangal*, col. 2, lines 17-30. Nothing in Figure 2 suggests or indicates that communications between device 105 and network system 113 can, or actually does, take place **simultaneously** in both sub bands. Other than Figure 2, Appellee has not otherwise pointed to anything in *Mangal* to show that *Mangal* discloses communications occurring in both sub bands simultaneously. Appellee has pointed to column 5, lines 24-30 of *Mangal* as support for the contention that *Mangal*'s system performs receiving and transmitting operations almost at the same time. *See* Examiner's Answer, pg. 4. However, the required time difference between transmissions and receptions of *Mangal*'s system does not satisfy the claim language and is not a dispositive issue. That is, regardless of whether *Mangal*'s receiving and transmitting occur "almost at the same time," such "simultaneous" or "delayed" operations still take place completely on **one** sub band, e.g., either licensed or unlicensed sub band.

Further, Appellee asserts that *Mangal*'s selection process is directed to preliminary assignment of applications to a corresponding quality of service link slot for communication on the same MAC frame. *See* Examiner's Answer, pg. 9. Given that only *Mangal*'s devices 105, 106, and 107 could reasonably be interpreted as the claimed "subscriber station," Appellant neither asserts nor contends that communications between *Mangal*'s devices 105-107 and network 113 occur on different MAC control frames analogous to the licensed band and unlicensed band set forth in the claims. Rather, it is clear that *Mangal* describes selecting **either**

a licensed **or** unlicensed sub band of the single MAC control frame to service communications between its devices, e.g., 105, and network 113, where this selection is based on the required quality of service. *See, e.g., Mangal*, col. 2, lines 10-30. That is, if the communication service between device 105 and network 113 requires a higher level of quality, *Mangal*'s system selects the licensed sub band and **all** communications between device 105 and network 113, e.g., uploads and downloads, take place over the licensed portion of the same MAC frame. *See, e.g., id.* at Fig. 3, step 306, col. 6, lines 46-49 ("[T]he communication service is provided between the network system 113 and the requesting communication device 105, 106, and 107 over the **selected** portion of the MAC layer." (emphasis added)) As such, bidirectional communications between each of devices 105-107 and network 113 occur solely in the selected sub band of the single MAC frame at any given time, and not in both sub bands simultaneously.

Appellee also asserts that Appellant's discussion regarding tear down in the Appeal Brief is irrelevant, as tear down does not indicate end of the communication between *Mangal*'s subscriber unit system 100 and base station system 109. *See* Examiner's Answer, pg. 9. First, Appellant does not contend that a tear down terminates communication between *Mangal*'s subscriber unit system 100 and base station system 109. Second, contrary to Appellee's assertion, the discussion of *Mangal*'s tear down procedures is quite relevant under the proper interpretation that only *Mangal*'s devices 105-107 could be reasonably construed as the claimed "subscriber station." The discussion in the Appeal Brief shows that *Mangal* clearly discloses that a tear down terminates a communication session between *Mangal*'s devices 105-107 and network system 113, and such tear downs are necessary in order for a new communication session with another device, e.g., 106, to begin. *See, e.g.,* Appeal Brief, pgs. 9-10; *Mangal*, col. 6, lines 53-56. As such, bidirectional communications between devices 105-107 and network 113 occur solely in one sub band of the single MAC frame and not simultaneously in both sub bands.

Also, Appellee contends that Appellant's discussion of *Mangal*'s system on page 14 of the Appeal Brief contradicts the teaching of *Mangal*. *See* Examiner's Answer, pg. 11. The Appeal Brief's discussion relates to how *Mangal* would require a substantial modification so that

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its devices 105-107 could transmit in a licensed band and receive in an unlicensed band, or vice versa, at the same time or during the same communication session, and such a modification would require a complete abandonment of the tear down process. Contrary to Appellee's assertion, the cited portions of *Mangal* actually describes the request slots of its MAC control frame managing reservation information and queuing. *See id.* (citing *Mangal*, col. 5, lines 24-67). Again, at the cited portions, *Mangal* provides one example of placing voice information in the licensed allocation sub frame (constant bit rate – CRB), where the entire communication service of that voice information takes place in the licensed sub frame. Since Appellee has not shown any teaching in *Mangal* and/or AAPA as disclosing communications in both low interference and high interference frequency bands occurring at the same time, the rejection of claims 40 and 53 based on obviousness wholly fails. The rejection of claims 42-52 and 55-65 also fails because claims 42-52 and 55-65 depend from claims 40 and 53, respectively, and inherit all the limitations of the independent claim from which they depend. Accordingly, Appellant respectfully requests that the Board overturn the current rejections of claims 40, 42-53, and 55-65 at least for the above reasons.

As mentioned above, independent claims 76 and 77 recite similar limitations of receiving in a low interference frequency band and transmitting in a high interference frequency band, both occurring in the same communication session. Appellee has not responded to Appellant's arguments set forth in the Appeal Brief relating to this limitation of claims 76 and 77. As such, Appellant stands on the arguments submitted in the Appeal Brief. Appellant respectfully asserts that claims 76 and 77 are patentable over the 35 U.S.C. § 103(a) rejection of record and respectfully request that the Board reverses of the rejection of record.

3. Appellee has not shown the references disclose higher order filtering on signals received at said base station.

Independent claim 66 recites "wherein said base station performs on signals received at said plurality of subscriber stations." In the Examiner's Answer, Appellee states that a request for a reference support for Official Notice is untimely. *See* Examiner's Answer, pg. 10. Even if Appellant agrees with the Official Notice that "using noise as a quality characteristic is well

known," Appellee's rejection still fails to address the fact that the Official Notice does not relate to performing of higher order filtering at the base station. *See id.* at pg. 6. Although Appellee points to AAPA as disclosing filtering received signals, Appellee has not pointed to any other reference as disclosing performing higher order filtering at the base station than at the subscriber stations. That is, combining *Mangal* and AAPA as Appellee suggests would merely result in *Mangal*'s base station and subscriber stations filtering received signals without regard to the order of filtering performed at such base station and subscriber stations. Appellee's response effectively ignores this limitation. Instead of pointing to a reference as disclosing the performance of higher order filtering, Appellee simply asserts that it would have been obvious to do so in order to reduce cost. Appellee's statement that system cost can be reduced by using a higher order filter does not qualify as prior art. Appellee neither took Official Notice nor stated that using a higher order filter at the base station is common knowledge. As such, regardless of the Official Notice taken, Appellee still fails to meet his burden to establish prima facie case of obviousness.

Dependent claims 46, 48, 59, and 61 recite similar limitations as claim 66. In the Examiner's Answer, Appellee states that Appellant argues that "using high order/more complicated and expensive filtering at a base station in comparison with filters at multiple users' station is a ***patentable*** feature." *See* Examiner's Answer, pg. 11 (emphasis added). As Appellant best understands, Appellee appears to have misunderstood Appellant's argument by paraphrasing Appellant's argument as contending the recited feature is "patentable." This language suggests that there may be a dispute under 35 U.S.C. § 101. However, there is no patentability issues in this case. Instead, as mentioned above and set forth in the Appeal Brief, Appellee simply has not met his burden of establishing prima facie case of obviousness.

Since Appellee has not shown any teaching in *Mangal* and/or AAPA as disclosing higher order filtering on signals received at said base station, the rejections of independent claim 66 based on obviousness wholly fail. Because dependent claims 46, 48, 59, and 61 depend from claims 40 and 53, respectively, they are patentable for at least the reasons set forth above. Moreover, as shown, dependent claims 46, 48, 59, and 61 set forth additional limitations making

them patentable in their own right. Accordingly, the Appellant respectfully requests that the Board overturn the current rejections of claims 46, 48, 59, 61, and 66 at least for the above reasons.

4. Appellee has not complied with examining procedures governing the content of the Examiner's Answer.

Section 1207.02(A) of the M.P.E.P., titled Content Requirements for Examiner's Answer, requires the Examiner's Answer to "point out where each of the specific limitations recited in the rejected claims is found in the prior art relied on in the rejection, identify the differences between the rejected claims and the prior art relied on, and explain why it would have been obvious to have modified the primary reference to arrive at the claimed subject matter." Appellee has failed to comply with such examining procedures, thereby denying Appellant's right to best address the rejections on appeal.

First, the Examiner's Answer fails to properly quote the language of claim 66 in its attempt to "point out" where each of the specific limitations recited in claim 66 is found in *Mangal*. As such, Appellant is required to guess as to which limitation of claim 66 the citations of the prior art relate. For instance, the alleged language of claim 66 in the Examiner's Answer relates to transmitting and receiving data at a subscriber station while the actual language of claim 66 relates to a base station adapted to transmit data in expected low noise frequency and subscriber stations adapted to transmit in expected high noise frequency. *See* Examiner's Answer, pgs. 5-6.

Second, Appellee has failed to "point out" where the specific limitation of higher order filtering is found in either *Mangal* or AAPA. As mentioned above, the Examiner's Answer concedes *Mangal* "does not teach . . . performing higher order filtering at the base station than the subscriber stations." *See* Examiner's Answer, pg. 6. Rather than "pointing out" where this specific limitation can be found, the Examiner's Answer simply states that AAPA teaches filtering a received signal at the base station or subscriber stations. Appellant again points out that the Examiner's Answer has not shown where this specific limitation can be found because

merely "filtering received signals" clearly differs from performing higher order filtering at the base station than at subscriber stations. As such, the Examiner's Answer does not satisfy the requirements of M.P.E.P. § 1207.02 (A), and as a result, Appellant is denied the opportunity to fully address the rejection on appeal.

B. Second Ground of Rejection

Claims 40, 42-53, 55-71, and 76-77 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter of the invention. Appellee failed to address this ground of rejection in the Examiner's Answer. That is, there is no mention of this ground of rejection anywhere in the Examiner's Answer. As such, Appellant requests that the Board treat the rejection as having been dropped by Appellee.

Also, Appellant stands on the arguments submitted in the Appeal Brief. Appellant respectfully asserts that claims 40, 42-53, 55-71, and 76-77 are definite, as they particularly point out and distinctly claim the subject matter of the invention. As such, Appellant respectfully requests that the Board reverse the rejections of record.

IV. CONCLUSION

Further to the discussion above and Appellant's discussion in its Appeal Brief, Appellant submits that claims 40, 42-53, 55-71, and 76-77 are patentable over the cited references. Therefore, Appellant respectfully requests that the Board overturn the rejections of pending claims 40, 42-53, 55-71, and 76-77.

Appellant believes no fee is due with this response. Please charge any fees required or credit any overpayment to Deposit Account No. 06-2380, under Order No. 68144/P009US/10501230 during the pendency of this Application pursuant to 37 CFR 1.16 through 1.21 inclusive, and any other sections in Title 37 of the Code of Federal Regulations that may regulate fees.

TP-Link Ex. 1004
Page 427

Dated: November 24, 2009

Respectfully submitted,

By

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TP-Link Ex. 1004
Page 428

Electronic Acknowledgement Receipt

EFS ID:	6514852
Application Number:	10095307
International Application Number:	
Confirmation Number:	3972
Title of Invention:	Spectrum allocation system and method for multi-band wireless RF data communications
First Named Inventor/Applicant Name:	Randy J. Karr
Customer Number:	29053
Filer:	Robert L. Greeson/Carol Martin
Filer Authorized By:	Robert L. Greeson
Attorney Docket Number:	68144/P009US/10501230
Receipt Date:	24-NOV-2009
Filing Date:	11-MAR-2002
Time Stamp:	12:21:49
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Reply Brief Filed	P009USReplyBrief112409.pdf	541461 6671908a0a5d910bc966eb0b429827853b d2988c	no	11

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National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/095,307	03/11/2002	Randy J. Karr	68144/P009US/10501230	3972

29053 7590 12/16/2009

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DALLAS, TX 75201-2784

EXAMINER	
LEVITAN, DMITRY	
ART UNIT	PAPER NUMBER
2461	

MAIL DATE	DELIVERY MODE
12/16/2009	PAPER

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10095307	3/11/02	KARR ET AL.	68144/P009US/10501230

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EXAMINER	
Dmitry H.. Levitan	
ART UNIT	**PAPER**
2461	20091214

DATE MAILED:

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Commissioner for Patents

The Reply Brief, filed 11/24/09, has been entered and considered. The application has been forwarded to the Board of Patent Appeals and Interferences for a decision on the appeal.

/Dmitry H. Levitan/
Primary Examiner, Art Unit 2461

PTO-90C (Rev.04-03)

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/095,307	03/11/2002	Randy J. Karr	68144/P009US/10501230	3972

29053 7590 01/07/2010
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FULBRIGHT & JAWORSKI L.L.P
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SUITE 2800
DALLAS, TX 75201-2784

Appeal No: 2010-002256
Application: 10/095,307
Appellant: Randy J. Karr et al.

Board of Patent Appeals and Interferences
Docketing Notice

Application 10/095,307 was received from the Technology Center at the Board on December 22, 2009 and has been assigned Appeal No: 2010-002256.

A review of the file indicates that the following documents have been filed by appellant:

Appeal Brief filed on:	July 06, 2009
Reply Brief filed on:	November 24, 2009
Request for Hearing filed on:	October 05, 2009

In all future communications regarding this appeal, please include both the application number and the appeal number.

The mailing address for the Board is:

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/095,307	03/11/2002	Randy J. Karr	68144/P009US/10501230	3972

29053 7590 07/30/2010
FULBRIGHT & JAWORSKI L.L.P
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LEVITAN, DMITRY	
ART UNIT	PAPER NUMBER
2461	

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FULBRIGHT & JAWORSKI, L.L.P
2200 ROSS AVENUE
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DALLAS, TX 75201-2784

Appeal No:	2010-002256
Appellant:	Randy J. Karr, Jean-Francois Grenon, Frank D. Cole et al.
Application No:	10/095,307
Hearing Room:	B
Hearing Docket:	B
Hearing Date:	Tuesday, September 21, 2010
Hearing Time:	09:00 AM
Location:	Madison Building - East Wing 600 Dulany Street, 9th Floor Alexandria, Virginia 22313-1450

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Names of other visitors expected to accompany counsel: _____

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10095307	APNH	07/30/2010	68144/P009US/10501230

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Docket No.: 68144/P009US/10501230
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Randy J. Karr et al.

APPEAL NO. 2010-002256

Confirmation No.: 3972

Application No.: 10/095,307

Filed: March 11, 2002

Art Unit: 2616

For: SPECTRUM ALLOCATION SYSTEM AND METHOD FOR MULTI-BAND WIRELESS RF DATA COMMUNICATIONS

Examiner: D. Levitan

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MS Appeal Brief - Patents
Commissioner for Patents
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Pursuant to the Notice of Hearing (copy attached) mailed July 30, 2010, a hearing has been scheduled before the Board of Patent Appeals and Interferences for the above-referenced application on Tuesday, September 21, 2010 at 09:00 AM. Appellant hereby respectfully requests that the hearing be rescheduled for a time in the afternoon of the same day, or if a new hearing time is not available for the same day, that a new date and afternoon hearing time be set by the Board.

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Application No.: 10/095,307
Appeal No. 2010-002256

Docket No.: 68144/P009US/10501230

Please contact the undersigned if further information or discussion is required.

Dated: August 16, 2010

Respectfully submitted,

By /Robert L Greeson/

Robert L Greeson
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Attorney for Appellant

PAGE 3/5 * RCVD AT 8/16/2010 4:25:12 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-6/2 * DNIS:2738300 * CSID: * DURATION (mm-ss):01-38

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Appeal No:	2010-002256
Appellant:	Randy J. Karr, Jean-Francois Grenon, Frank D. Cole et al.
Application No:	10/095,307
Hearing Room:	B
Hearing Docket:	B
Hearing Date:	Tuesday, September 21, 2010
Hearing Time:	09:00 AM
Location:	Madison Building - East Wing 600 Dulany Street, 9th Floor Alexandria, Virginia 22313-1450

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Appellant's Request for Change in Oral Hearing Time (2 pages)
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Appeal No. **2010-002256**
Inventor: Randy J. Karr et al.

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FROM: FULBRIGHT & JAWORSKI L.L.P.
Robert L Greeson
PHONE: (214) 855-7430
Attorney Dkt. #: 68144/P009US/10501230

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CONTENTS:
Appellant's Request for Change in Oral Hearing Time (2 pages)
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(Carol Martin)

Docket No.: 68144/P009US/10501230
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Randy J. Karr et al.

APPEAL NO. 2010-002256

Confirmation No.: 3972

Application No.: 10/095,307

Filed: March 11, 2002

Art Unit: 2616

For: SPECTRUM ALLOCATION SYSTEM AND METHOD FOR MULTI-BAND WIRELESS RF DATA COMMUNICATIONS

Examiner: D. Levitan

REQUEST TO CANCEL REQUEST FOR CHANGE IN ORAL HEARING TIME

MS Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Commissioner:

Pursuant to the Notice of Hearing mailed July 30, 2010, a hearing has been scheduled before the Board of Patent Appeals and Interferences for the above-referenced application on Tuesday, September 21, 2010 at 09:00 AM. Appellant previously submitted a Request for Change in Oral Hearing Time, and now respectfully requests cancellation of such request. Appellant submits herewith Confirmation of Notice of Hearing scheduled for September 21, 2010 at 09:00 AM.

Application No.: 10/095,307
Appeal No. 2010-002256

Docket No.: 68144/P009US/10501230

Dated: August 18, 2010

Respectfully submitted,

By

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Appeal No:	2010-002256
Appellant:	Randy J. Karr, Jean-Francois Grenon, Frank D. Cole et al.
Application No:	10/095,307
Hearing Room:	B
Hearing Docket:	B
Hearing Date:	Tuesday, September 21, 2010
Hearing Time:	09:00 AM
Location:	Madison Building - East Wing 600 Dulany Street, 9th Floor Alexandria, Virginia 22313-1450

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DATE: August 19, 2010

PTO IDENTIFIER: **Application Number** **10/095,307 Conf# 3972**
Appeal No. **2010-002256**
Inventor: Randy J. Karr et al.

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Attorney Dkt. #: 68144/P009US/10501230

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Appellant's Request to Cancel Request for Change in Oral Hearing Time (2 pages)
Appellant's Confirmation of Notice of Hearing set for 09/21/2010 at 09:00 AM(1 page)
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PAGE 1/5 * RCVD AT 8/19/2010 4:10:11 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-6/37 * DNIS:2738300 * CSID: * DURATION (mm-ss):01-12

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Application No. (if known): 10/095,307
Appeal No. 2010-002256

Attorney Docket No.: 68144/P009US/10501230

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Appellant's Confirmation of Notice of Hearing (Appeal No. 2010-002256) (1 page)

PAGE 2/5 * RCVD AT 8/19/2010 4:10:11 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-6/37 * DNIS:2738300 * CSID: * DURATION (mm-ss):01-12

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Docket No.: 68144/P009US/10501230
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Randy J. Karr et al.

APPEAL NO. 2010-002256

Confirmation No.: 3972

Application No.: 10/095,307

Filed: March 11, 2002

Art Unit: 2616

For: SPECTRUM ALLOCATION SYSTEM AND METHOD FOR MULTI-BAND WIRELESS RF DATA COMMUNICATIONS

Examiner: D. Levitan

Approved 8/23/10

REQUEST TO CANCEL REQUEST FOR CHANGE IN ORAL HEARING TIME

MS Appeal Brief - Patents
Commissioner for Patents
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Dear Commissioner:

Pursuant to the Notice of Hearing mailed July 30, 2010, a hearing has been scheduled before the Board of Patent Appeals and Interferences for the above-referenced application on Tuesday, September 21, 2010 at 09:00 AM. Appellant previously submitted a Request for Change in Oral Hearing Time, and now respectfully requests cancellation of such request. Appellant submits herewith Confirmation of Notice of Hearing scheduled for September 21, 2010 at 09:00 AM.

PTO/SB/97 (09-04)
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Application No. (if known): 10/095,307
Appeal No. 2010-002256

Attorney Docket No.: 68144/P009US/10501230

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Appellant's Request to Cancel Request for Change in Oral Hearing Time (2 pages)
Appellant's Confirmation of Notice of Hearing (Appeal No. 2010-002256) (1 page)

MULTI-FAX TRANSMISSION

DATE: August 19, 2010

PTO IDENTIFIER: **Application Number** **10/095,307 Conf# 3972**
Appeal No. **2010-002256**
Inventor: Randy J. Karr et al.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/095,307	03/11/2002	Randy J. Karr	68144/P009US/10501230	3972

29053 7590 09/29/2010
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LEVITAN, DMITRY	
ART UNIT	PAPER NUMBER
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RANDY J. KARR, JEAN-FRANCOIS GRENON,
and FRANK D. COLE

Appeal 2010-002256
Application 10/095,307
Technology Center 2400

Before JOSEPH F. RUGGIERO, MARC S. HOFF, and
CARLA M. KRIVAK, *Administrative Patent Judges*.

RUGGIERO, *Administrative Patent Judge*.

DECISION ON APPEAL[1]

---

[1] The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, or for filing a request for rehearing, as recited in 37 C.F.R. § 41.52, begins to run from the "MAIL DATE" (paper delivery mode) or the "NOTIFICATION DATE" (electronic delivery mode) shown on the PTOL-90A cover letter attached to this decision.

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134 from the Final Rejection of claims 40, 42-53, 55-71, 76, and 77, which are all of the pending claims. Claims 1-23, 25-39, 41, and 54 have been canceled. Claims 24 and 72-75 are withdrawn from consideration as being directed to a non-elected invention. An oral hearing on this appeal was conducted on September 21, 2010. We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

Rather than reiterate the arguments of Appellants and the Examiner, reference is made to the Appeal Brief (filed July 6, 2009), the Answer (mailed September 24, 2009), and the Reply Brief (filed November 24, 2009) for the respective details. Only those arguments actually made by Appellants have been considered in this decision. Arguments which Appellants could have made but chose not to make in the Briefs have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(vii).

Appellants' Invention

Appellants' claimed invention relates to a dual band spectrum allocation method for wireless data communications which utilizes discrete bands for upstream and downstream data communications. (*See generally* Spec. ¶ [0012]).

Claim 40 is illustrative of the invention and reads as follows:

40. A method for increasing capacity of a wireless data communication system, said method comprising the steps of:

receiving, at a subscriber station, data on a first frequency in a frequency band expected to experience low interference;

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transmitting, at said subscriber station, data on a second frequency in a frequency band expected to experience high interference,

wherein said low interference frequency band and said high interference frequency are separated by at least one octave; and

wherein at least a portion of said receiving and at least a portion of said transmitting occur at the same time.

The Examiner's Rejection

The Examiner's Answer cites the following prior art references:

Mangal	US 6,801,519 B1	Oct. 5, 2004 (filed Apr. 11, 2000)

Appellants' Admitted Prior Art (AAPA)

Claims 40, 42-53, 55-71, 76, and 77, all of the pending claims, stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Mangal in view of AAPA.[2]

ISSUES

Based on Appellants' contentions, as well as the findings and conclusions of the Examiner, the pivotal issues before us are whether the Examiner erred in determining that the combination of Mangal and AAPA discloses:

a) at least a portion of the transmitting and receiving at base and subscriber stations over high interference and low frequency interference

[2] Although the Examiner, in the final Office action (mailed October 6, 2008), had made a 35 U.S.C. § 112, second paragraph, rejection of claims 40, 42-53, 55-71, 76, and 77, no mention of this rejection is made in the Examiner's Answer. We conclude, therefore, that this rejection has been withdrawn. *See Ex parte Emm*, 118 USPQ 180, 181 (BPAI 1957).

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bands occurs *at the same time* or *during the same communication session*, and

b) higher order filtering is performed at the base station than that performed at the subscriber stations.

PRINCIPLES OF LAW

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. *See In re Fine*, 837 F.2d 1071, 1073 (Fed. Cir. 1988). In so doing, the Examiner must make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966) (stating that 35 U.S.C. § 103 leads to three basic factual inquiries: the scope and content of the prior art, the differences between the prior art and the claims at issue, and the level of ordinary skill in the art). Furthermore,

> "there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness" . . . . [H]owever, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.

KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 418 (2007) (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)).

ANALYSIS

Claims 40, 42-53, and 55-65

With respect to the Examiner's obviousness rejection of appealed independent claims 40 and 53, Appellants argue that Mangal fails to disclose a communication method in which data is transmitted in one frequency band

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and received in a second frequency band, with at least a portion of both transmission and reception occurring *at the same time* as claimed. According to Appellants (App. Br. 8-9; Reply Br. 4-6), Mangal, at best, discloses bidirectional communication occurring entirely in only one of a low interference band *or* a high interference band at the same time, and not simultaneously in both bands.

We agree with Appellants. As argued by Appellants, Mangal discloses that the base station 109 selects either the licensed sub frame 201 or the unlicensed sub frame 202 to provide communication and, upon selection, communication takes place only over the selected portion of the media access control (MAC) layer (Figs. 2-3; col. 6, ll. 35-38, 46-49). Mangal further discloses that upstream and downstream voice and internet communication are provided only on the selected licensed or unlicensed sub frame portion of the MAC layer (col. 8, ll. 1-6; col. 8, l. 65–col. 9, l. 7). Further, even assuming that the Examiner's contention (Ans. 4) that simultaneous bi-directional communication is necessary for real time communication services, such as telephony, is correct, Mangal suggests that any such bi-directional communication would still take place in only one sub band, i.e., licensed or unlicensed, and not both bands as claimed.

Lastly, we note that the Examiner (Ans. 5) has relied upon pages 4 and 5 of AAPA for a teaching of using licensed and unlicensed bands separated by at least one octave for communication. Such a teaching does not overcome the deficiencies of Mangal in disclosing transmitting and receiving over *both* a low interference frequency band and a high frequency band *at the same time,* as claimed.

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For the above reasons, we do not sustain the Examiner's 35 U.S.C. § 103(a) rejection of independent claims 40 and 53, nor of claims 42-52 and 55-65 dependent thereon.

Independent claims 76 and 77

For similar reasons as discussed *supra*, we do not sustain the Examiner's obviousness rejection of independent claims 76 and 77 based on the combination of Mangal and AAPA. Independent claims 76 and 77 differ from independent claims 40 and 53 in that transmission and reception over low interference and high interference bands occurs "during the same communication session" rather than "at the same time."

We agree with Appellants that, since Mangal discloses that after a call has been completed on a selected licensed or unlicensed sub band, the virtual connection paths are torn down, Mangal intends the system to handle communication requests for only one communication system at a time (col. 6, ll. 53-56; col. 8, ll. 17-19; col. 9, ll. 7-9). Accordingly, since a reverse tear down occurs in Mangal at the end of each communication session on a selected sub frame band and a new selection of a sub band must be made before the next communication session begins, there is no teaching or suggestion of bidirectional communication occurring over both high frequency and low frequency bands "during the same communication session" as claimed.

Claim 66-71

We also do not sustain the Examiner's obviousness rejection, based on the combination of Mangal and AAPA, of independent claim 66, which

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includes the feature of performing higher order filtering on signals received at the base station than those received at the subscriber stations, and claims 67-71 dependent thereon. In addressing the claimed feature, the Examiner relies (Ans. 6) on pages 2 and 3 of AAPA for a teaching of filtering received signals at base and subscriber stations in a point-to-multipoint communication system. The Examiner additionally takes Official Notice (Ans. 6) that "noise as [a] quality characteristic is well known and expected in the art." From these teachings, the Examiner concludes (*id.*) that it would have been obvious to use a single higher order filter at the base station as compared to multiple filters at the subscriber stations to "reduce the system cost."

We agree with Appellants (App. Br. 10-11; Reply Br. 7-8), however, that the combination of Mangal and AAPA would merely suggest the filtering of received signals at the base and subscriber stations without regard to the order of filtering performed at the base and subscriber stations. Similarly, we agree with Appellants that the Examiner's taking Official Notice that noise is a well known quality characteristic does not relate to the performing of higher order filtering at the base station. As such, the Examiner's unsupported conclusion that an artisan would have found it obvious to place a higher order filter at the base station to reduce cost does not provide any articulated reasoning with a rational underpinning to support the legal conclusion of obviousness. *See KSR*, 550 U.S. at 418.

CONCLUSION OF LAW

Based on the findings of facts and analysis above, we conclude that the Examiner erred in rejecting claims 40, 42-53, 55-71, 76, and 77 for obviousness under 35 U.S.C. § 103(a).

DECISION

The Examiner's 35 U.S.C. § 103(a) rejection of claims 40, 42-53, 55-71, 76, and 77, all of the appealed claims, is reversed.

REVERSED

babc

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LEVITAN, DMITRY	
ART UNIT	PAPER NUMBER
2461	

DATE MAILED: 12/07/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/095,307	03/11/2002	Randy J. Karr	68144/P009US/10501230	3972

TITLE OF INVENTION: SPECTRUM ALLOCATION SYSTEM AND METHOD FOR MULTI-BAND WIRELESS RF DATA COMMUNICATIONS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
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10/095,307	03/11/2002	Randy J. Karr	68144/P009US/10501230	3972

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/095,307	03/11/2002	Randy J. Karr	68144/P009US/10501230	3972

29053 7590 12/07/2010

FULBRIGHT & JAWORSKI L.L.P
2200 ROSS AVENUE
SUITE 2800
DALLAS, TX 75201-2784

EXAMINER	
LEVITAN, DMITRY	
ART UNIT	PAPER NUMBER
2461	

DATE MAILED: 12/07/2010

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 1936 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 1936 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

Notice of Allowability	Application No.	Applicant(s)	
	10/095,307	KARR ET AL.	
	Examiner	Art Unit	
	Dmitry H. Levitan	2461	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *BPAI decision on 9/29/10*.

2. ☒ The allowed claim(s) is/are *40, 42-53, 55-71, 76 and 77 renumbered as 1-19, 21, 22, 20 and 23-32*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Examiner-Initiated Interview Summary	Application No.	Applicant(s)	
	10/095,307	KARR ET AL.	
	Examiner	Art Unit	
	Dmitry H. Levitan	2461	

All Participants:

(1) *Dmitry H. Levitan*.

(2) *Robert L. Greeson*.

Status of Application: _____

(3) _____.

(4) _____.

Date of Interview: *29 November 2010*

Time: *1 pm*

Type of Interview:
☒ Telephonic
☐ Video Conference
☐ Personal (Copy given to: ☐ Applicant ☐ Applicant's representative)

Exhibit Shown or Demonstrated: ☐ Yes ☒ No
If Yes, provide a brief description:

Part I.

Rejection(s) discussed:
N/A

Claims discussed:
24 and 72-75

Prior art documents discussed:
N/A

Part II.

SUBSTANCE OF INTERVIEW DESCRIBING THE GENERAL NATURE OF WHAT WAS DISCUSSED:
Examiner indicated that claims 24 and 72-75, which were withdrawn from the consideration due to the case restriction, should be canceled

Part III.

☒ It is not necessary for applicant to provide a separate record of the substance of the interview, since the interview directly resulted in the allowance of the application. The examiner will provide a written summary of the substance of the interview in the Notice of Allowability.
☐ It is not necessary for applicant to provide a separate record of the substance of the interview, since the interview did not result in resolution of all issues. A brief summary by the examiner appears in Part II above.

/Dmitry H. Levitan/
Primary Examiner, Art Unit 2461

(Applicant/Applicant's Representative Signature – if appropriate)

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Robert L. Greeson on 11/29/10.

The application has been amended as follows:

Claims 24 and 72-75 have been cancelled.

Note. Claims 24 and 72-75 have been cancelled as the claims withdrawn from consideration.

Allowable Subject Matter

2. Claims 40, 42-53, 55-71, 76 and 77 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry H. Levitan whose telephone number is (571) 272-3093. The examiner can normally be reached on 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Dmitry H. Levitan
Primary Examiner
Art Unit 2461

/Dmitry H. Levitan/
Primary Examiner, Art Unit 2461

EAST Search History

EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	12	((radio or wireless or rf or cellular) and ((high or low) near2 (quality or qos or interference or noise)) and octave).clm.	US-PGPUB; USPAT; UPAD	OR	ON	2010/11/30 10:11
L4	9	((radio or wireless or rf or cellular) and ((high or low) near2 (quality or qos or interference or noise)) and (filter $5 near3 (base adj station))).clm.	US-PGPUB; USPAT; UPAD	OR	ON	2010/11/30 10:16

11/30/10 10:18:43 AM
C:\Documents and Settings\DLevitan\My Documents\EAST\Workspaces\10095307.wsp

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	10095307	KARR ET AL.
	Examiner	Art Unit
	Dmitry Levitan	2616

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	05/08/2008	09/29/2008	11/30/2010						
	1	-	-	-						
	2	-	-	-						
	3	-	-	-						
	4	-	-	-						
	5	-	-	-						
	6	-	-	-						
	7	-	-	-						
	8	-	-	-						
	9	-	-	-						
	10	-	-	-						
	11	-	-	-						
	12	-	-	-						
	13	-	-	-						
	14	-	-	-						
	15	-	-	-						
	16	-	-	-						
	17	-	-	-						
	18	-	-	-						
	19	-	-	-						
	20	-	-	-						
	21	-	-	-						
	22	-	-	-						
	23	-	-	-						
	24	÷	N	-						
	25	-	-	-						
	26	-	-	-						
	27	-	-	-						
	28	-	-	-						
	29	-	-	-						
	30	-	-	-						
	31	-	-	-						
	32	-	-	-						
	33	-	-	-						
	34	-	-	-						
	35	-	-	-						
	36	-	-	-						

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	10095307	KARR ET AL.
	Examiner	Art Unit
	Dmitry Levitan	2616

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	05/08/2008	09/29/2008	11/30/2010						
	37	-	-	-						
	38	-	-	-						
	39	-	-	-						
1	40	✓	✓	=						
	41	✓	-	-						
2	42	✓	✓	=						
3	43	✓	✓	=						
4	44	✓	✓	=						
5	45	✓	✓	=						
6	46	✓	✓	=						
7	47	✓	✓	=						
8	48	✓	✓	=						
9	49	✓	✓	=						
10	50	✓	✓	=						
11	51	✓	✓	=						
12	52	✓	✓	=						
13	53	✓	✓	=						
	54	✓	-	-						
14	55	✓	✓	=						
15	56	✓	✓	=						
16	57	✓	✓	=						
17	58	✓	✓	=						
18	59	✓	✓	=						
19	60	✓	✓	=						
21	61	✓	✓	=						
22	62	✓	✓	=						
20	63	✓	✓	=						
23	64	✓	✓	=						
24	65	✓	✓	=						
25	66	✓	✓	=						
26	67	✓	✓	=						
27	68	✓	✓	=						
28	69	✓	✓	=						
29	70	✓	✓	=						
30	71	✓	✓	=						
	72	÷	N	-						

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	10095307	KARR ET AL.
	Examiner	Art Unit
	Dmitry Levitan	2616

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	05/08/2008	09/29/2008	11/30/2010						
	73	÷	N	-						
	74	÷	N	-						
	75	÷	N	-						
31	76		✓	=						
32	77		✓	=						

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	10095307	KARR ET AL.
	Examiner	Art Unit
	Dmitry H Levitan	2461

ORIGINAL		INTERNATIONAL CLASSIFICATION														
CLASS	SUBCLASS	CLAIMED									NON-CLAIMED					
370	329	H	0	4	Q	7/00 ()										

CROSS REFERENCE(S)						
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)					

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
1	40	15	56		72										
	41	16	57		73										
2	42	17	58		74										
3	43	18	59		75										
4	44	19	60	31	76										
5	45	21	61	32	77										
6	46	22	62												
7	47	20	63												
8	48	23	64												
9	49	24	65												
10	50	25	66												
11	51	26	67												
12	52	27	68												
13	53	28	69												
	54	29	70												
14	55	30	71												

NONE		Total Claims Allowed:	
(Assistant Examiner)	(Date)	32	
/Dmitry H Levitan/ Primary Examiner.Art Unit 2461	11/30/10	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	2

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	10095307	KARR ET AL.
	Examiner	Art Unit
	Dmitry Levitan	2616

SEARCHED			
Class	Subclass	Date	Examiner
370	329,332, 341, 349, 395.21, 395.43	11/30/10	DL
455	450, 452, 464, 560, 561, 552.1	11/30/10	DL

SEARCH NOTES		
Search Notes	Date	Examiner
IEEE, EAST	11/30/10	DL

INTERFERENCE SEARCH			
Class	Subclass	Date	Examiner
370	329	11/30/10	DL

To: doipdocket@fulbright.com,,
From: PAIR_eOfficeAction@uspto.gov
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Application	Document	Mailroom Date	Attorney Docket No.
10095307	NOA	12/07/2010	68144/P009US/10501230
	EXIN	12/07/2010	68144/P009US/10501230
	NOA	12/07/2010	68144/P009US/10501230

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/095,307	03/11/2002	Randy J. Karr	68144/P009US/10501230	3972

29053 7590 12/17/2010
FULBRIGHT & JAWORSKI L.L.P
2200 ROSS AVENUE
SUITE 2800
DALLAS, TX 75201-2784

EXAMINER	
LEVITAN, DMITRY	
ART UNIT	PAPER NUMBER
2461	

NOTIFICATION DATE	DELIVERY MODE
12/17/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

doipdocket@fulbright.com

RECORD OF ORAL HEARING

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex Parte RANDY J. KARR, JEAN-FRANCOIS GRENON,
and FRANK D. COLE

Appeal 2010-002256
Application 10/095,307
Technology Center 2400

Oral Hearing Held: September 21, 2010

Before JOSEPH F. RUGGIERO, MARC S. HOFF, and
CARLA M. KRIVAK, Administrative *Patent Judges.*

APPEARANCES:

ON BEHALF OF THE APPELLANT:

ROBERT GREESON, ESQUIRE
Fulbright & Jaworski, L.L.P.
2200 Ross Avenue
Suite 2800
Dallas, Texas 75201-2784

The above-entitled matter came on for hearing on Tuesday, September 21, 2009, commencing at 10:53 a.m., at the U.S. Patent and Trademark Office, 600 Dulany Street, Alexandria, Virginia, before Sam Wojack, a Notary Public.

THE USHER: Calendar No. 47; Appeal No. 2010-002256; Mr. Greeson.

MR. GREESON: Good morning.

JUDGE KRIVAK: Good morning.

JUDGE RUGGIERO: Good morning. Do you have a card you can give the --

MR. GREESON: Yes.

JUDGE RUGGIERO: Begin when ready.

MR. GREESON: Good morning. My name is Robert Greeson with Fulbright & Jaworski, and I'm here on behalf of Appellant, which is now NETGEAR, Inc. The Board may have seen Adaptix in the appeal papers as the party in interest, but that's changed as a result of recent assignment of patent applications. So, now the party in interest is NETGEAR. Now, unless the Board has any initial questions, I'll go ahead and get started.

From the outset, I think it would be helpful to briefly discuss the primary -- or, really, the only reference cited against the pending claims conceptually and talk about the differences between that system, which is the Mangal patent, and the pending claims. The Mangal reference teaches a system that increases the efficiency of wireless communication by recognizing different types of quality service requirements for different communication services within that system. Now, based on the required

TP-Link Ex. 1004
Page 477

qualify of service, that is, whether it's high or low, Mang allalocates one of a licensed or unlicensed band. That is for quality -- or for communication services that require high quality of services, Mangal allocates the licensed band for communication of the uplink and downlink. And on the other hand, where quality of service is low for a given communication, it allocates the unlicensed band in the uplink and downlink. And in that way, Mangal does not have to use licensed bandwidth for communications that don't require it.

Now, on the other hand, Appellant's claimed invention solves the problem in a different way. Appellant's invention recognizes that oftentimes in a network communication is asymmetrical between a subscriber and a base station; oftentimes, the communication of the downlink being much heavier than the uplink. And so, according to Appellant's invention, communication of the downlink is allocated on the licensed band to achieve a higher, cleaner data throughput, while communication on the uplink is achieved on the unlicensed band. And when I'm saying the licensed and unlicensed, really, that's a specific embodiment of -- or a correspondence of how it shows up in the claims, and the claims being a band expected to have high interference and a band expected to be low interference. So, that's what I mean when I'm saying licensed and unlicensed. Mangal teaches it in terms of licensed and unlicensed, but the claims set it out in terms of a band expected to have high interference and a band expected to have low interference, in case I'm speaking with some overlap there.

But in any event, the result of Appellant's invention is that, for instance, a subscriber would receive in one band, and then transmit in a different band. And according to the claimed set, that would occur at the

same time or within the same communication session. So, that being the difference: Mangal receiving and transmitting in one band, whether it be licensed or unlicensed, it's the same band, while, according to Appellant's invention, the transmission and reception occur in different bands.

Now, addressing specifically some of the things that happened in prosecution that I think that are some problems that led us to this point, the Examiner has construed Mangal's Subscriber System 100 as the claimed subscriber station. And in doing so, I believe the Examiner has misunderstood Mangal's disclosure. So, for instance, Mangal also discloses Communication Devices 105, 106, 107, et cetera; those devices are disclosed as being devices that receive data, specifically voice, audio and video. And I would point out to the Board that those devices are in fact what one of ordinary skill in the art would understand to be a subscriber station. Specific examples within Mangal are answering machines, fax machines, computers, wire-line phones and cell phones. So, again, I think that's all consistent with one of skill in the art would call a subscriber station.

On the other hand, Mangal's Subscriber System 100, upon a close reading of Mang, lperforms functions that are not consistent with how one would understand the subscriber station. What I mean by that is Mangal's Subscriber System 100 manages requests from the communication devices, transmits those requests, coordinates communications between the communication devices and base station, informs the communication devices of decisions on the communication service and whatnot. So, as I read Mangal, if anything, its Subscriber System 100 really functions as an access point, or something along those lines.

Now, I think it's important to consider why it would not be appropriate, perhaps, to draw a box around all of it. That is, the Subscriber System 100 and all of the devices and simply call that a subscriber station. Well, in doing so, one is at odds with how, again, one of skill in the art would understand what a subscriber station does. It does not perform the functions of System 100 but, rather -- Communication Device 100, but, specifically, Mangal points out that they're separate. For instance, Mangal describes Interface 103, an embodiment of which is a POTS interface. Mangal goes on to describe that the devices, Communications Devices 105 through 107 communicate with the system via, for example, DSL or a cable system. So, there's network components between communication devices and the subscriber system, therefore I don't think it's appropriate to construe the system as the subscriber station set forth in the claims.

Having said that, I think you can move on and talk about why Mangal does not satisfy the limitation, according to one claim set, where the transmission occurs in one band, and reception occurs in another band, at the same time. If you read Mangal, I think it makes it clear that when communication takes place, it occurs at the same time, over one of the selected bands. Mangal is clear that the base station allocates a particular sub-frame, which is within the MAC format frame itself. According to that, selection of virtual connection path is set up between the base station and the communication device where that connection path is based only on one of the licensed or unlicensed bands.

Furthermore, I think it's important to think about not only what's expressly in Mangal, but to give some thought to really what it means by

what's in the -- what's in Mangal, and then think about the context. So, my earlier reference, I distinguished Mangal in that it transmits in only one of the licensed or unlicensed bands, and I gave you some examples of what Mangal calls its communication devices. Mangal's communication devices are disclosed as a wire-line telephone, an answering machine, a fax machine, a cell phone, and a personal computer. Now, it's easy to say that most of those transmit and receive only one type of data. Of course, that's pretty obvious with the answering machine, the fax machine, and the wire-line phone and things like that. So, given that only one quality of service would be required, there would only be one -- there would only be a need for one band according to Mangal, whether it be licensed or unlicensed.

But furthermore, even in addressing its personal computer, it gives a very specific example where a computer requested a data session between -- from the base station that requires -- or that enables e-mail services and e-mail -- excuse me, Internet browsing and e-mail services. And Mangal is specific that, in that case, that would require a low quality of service and, therefore, the computer, given that data service session, would be serviced with the unlicensed band. So, I think it's helpful to understand that even when you consider the communication devices that are discussed, those communication devices would only have a need for one quality of service requirement in the first place, so it would be nonsensical for that device to transmit in one band and receive in another.

Furthermore, thinking about the nuts and bolts of Mangal, if you read Mangal in its entirety, there is absolutely no mention of any of the hardware that would be necessary for the Subscriber System 100 to communicate with

multiple communication devices at the same time or over different frequency bands. For example, there is no mention of a duplexer or multiplexer that could handle those types of communications. Moreover, there's no mention of any software that would be necessary to support that hardware.

Now moving on to a different claim set. I just discussed the claim set that calls out receiving in a low-interference band and transmitting in a high-interference band at the same time. There's a different claim set that's directed towards that occurring, the reception and the transmission in different bands, during the same communication session. And in view of what I just said, if we set that aside for a second and take everything in a most favorable light to the Examiner, that is, that he -- let's assume for a second that he is correct in construing Subscriber System 100 as a subscriber station as claimed. And if we even set aside that somehow transmission in one band and reception in another occurred at the same time, this limitation still could not be satisfied by Mangal. What I mean by that is that Mangal is very clear in what it designates a communication station and how it is set up, handled, and then ultimately terminated. Mangal, I believe at Figure 1, sets out two wireless links. It's a wireless link between Transceivers 102 and 108, which I believe corresponds to the licensed band; and then a wireless link between Transceiver 104 and 110, which refers to the unlicensed band. Now, Mangal is very clear that once it determines the quality of service for a given communication, it initiates a session over only one of those links. And Mangal goes on to state that once the communication services concludes, and that service being provided, again, over one of the wireless links

between 102 and 108 or 104 and 110, the session terminates and wireless capacity tears down. So, if Mangal were to somehow be able to effectuate communication in different bands, it would have to do so over both of the designated links, one being wireless -- or one being licensed and one being unlicensed, and, therefore, it would be required to do so in two communication sessions, which is with -- is at odds with the plain language of the claims.

Now, finally, I'll make some comments with regard to another feature of the claims that make them patentable in view of Mangal. And that is the claim set that features the base station performing higher-order filtering on signals received than the subscribers. Now, this feature is available because, as I mentioned earlier, Appellant's invention takes advantage of the asymmetrical nature of communication between the base station and subscriber. Specifically, the subscriber, according to Appellant's invention, receives only data in a licensed band, so it's cleaner, has higher throughput, and it requires less filtering. And on the other hand, according to Appellant's invention, the base station is receiving the high interference band and is responsible for performing the higher-order filtering to have effective communication.

Now, if you look at Mang as I've just told you, at Figure 1 it teaches two wireless links. One link is dedicated to the licensed band; one is dedicated to the unlicensed band. So, no matter how Mangal is construed, it really only leaves two possible scenarios, that is, the subscriber and base station, according to Mangal, communicate over the wireless link in the licensed band, in which case neither would have a need for higher-order

filtering, or subscriber and base station, according to Mangal, communicate over the unlicensed band, in which case both would have the need for high-ordered filtering. So, again, taking that, there's no way for Mangal to possibly have the relationship with respect to filtering at the subscriber and filtering at the base station as set forth in the claims.

Now, so, that's all of my comments. So, unless the Board has any questions, that's all I have for today.

JUDGE HOFF: No questions.

JUDGE KRIVAK: I have no questions.

MR. GREESON: Okay.

JUDGE RUGGIERO: No questions.

MR. GREESON: I certainly appreciate the Board's time.

JUDGE KRIVAK: Thank you.

JUDGE RUGGIERO: Thanks.

Whereupon, the proceedings, at 11:09 a.m., were concluded.

To: doipdocket@fulbright.com,,
From: PAIR_eOfficeAction@uspto.gov
Cc: PAIR_eOfficeAction@uspto.gov
Subject: Private PAIR Correspondence Notification for Customer Number 29053

Dec 17, 2010 05:49:49 AM

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UNITED STATES

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Application	Document	Mailroom Date	Attorney Docket No.
10095307	CTMS	12/17/2010	68144/P009US/10501230

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Dated: February 15, 2011 Signature: /Scott Matthews/
(Scott Matthews)

Docket No.: NETP.P0009US
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Randy J. Karr et al.

Application No.: 10/095,307 Confirmation No.: 3972

Filed: March 11, 2002 Art No.: 2461

For: SPECTRUM ALLOCATION SYSTEM AND METHOD FOR MULTI-BAND WIRELESS RF DATA COMMUNICATIONS Examiner: D. Levitan

NOTIFICATION UNDER 37 C.F.R. § 1.27(G) OF CHANGE IN ENTITY STATUS

Mailstop M Correspondence
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

The assignee of the above-identified patent hereby notifies the U.S.P.T.O that this patent is no longer entitled to small entity status. All fees going forward should be paid under large entity status. Assignee believes that this change in entity status does not affect any past payments made with respect to this patent. Therefore, no fee should be due with this notice. However, if Assignee is in error and it is discovered that a deficiency payment or other fee is due with this notice or as a result of this notice, please charge the amount which should have been filed herewith (or with any paper hereafter filed for this Patent by this firm) to our Deposit Account No. 06-2380, under Order No. NETP.P0009US.

Dated: February 10, 2011

Respectfully submitted,
By /Robert L. Greeson/
Robert L. Greeson
Registration No.: 52,966
FULBRIGHT & JAWORSKI L.L.P.
2200 Ross Avenue, Suite 2800
Dallas, Texas 75201-2784
(214) 855-7430
(214) 855-8200 (Fax)
Attorney for Assignee

90364894.1

Electronic Acknowledgement Receipt

EFS ID:	9449037
Application Number:	10095307
International Application Number:	
Confirmation Number:	3972
Title of Invention:	SPECTRUM ALLOCATION SYSTEM AND METHOD FOR MULTI-BAND WIRELESS RF DATA COMMUNICATIONS
First Named Inventor/Applicant Name:	Randy J. Karr
Customer Number:	29053
Filer:	David H. Tannenbaum/Scott Matthews
Filer Authorized By:	David H. Tannenbaum
Attorney Docket Number:	68144/P009US/10501230
Receipt Date:	15-FEB-2011
Filing Date:	11-MAR-2002
Time Stamp:	15:14:07
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Post Allowance Communication - Incoming	10095307EntityStatus.pdf	44714 fb67814c1023c36378d722293224430d10f637c4	no	1

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BIB DATA SHEET

CONFIRMATION NO. 3972

SERIAL NUMBER	FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
10/095,307	03/11/2002 RULE	370	2461	63144/P009US/10501230

APPLICANTS

Randy J. Karr, Maple Valley, WA;
Jean-Francois Grenon, Seattle, WA;
Frank D. Cole, Bothell, WA;

**** CONTINUING DATA ***************************

**** FOREIGN APPLICATIONS ***************************

**** IF REQUIRED, FOREIGN FILING LICENSE GRANTED ****
04/06/2002

Foreign Priority claimed ☐ Yes ☐ No 35 USC 119(a-d) conditions met ☐ Yes ☐ No Verified and Acknowledged _____ Examiner's Signature	☐ Met after Allowance Initials	STATE OR COUNTRY	SHEETS DRAWINGS	TOTAL CLAIMS	INDEPENDENT CLAIMS
		WA	2	39	3

ADDRESS

FULBRIGHT & JAWORSKI L.L.P
2200 ROSS AVENUE
SUITE 2800
DALLAS, TX 75201-2784
UNITED STATES

TITLE

SPECTRUM ALLOCATION SYSTEM AND METHOD FOR MULTI-BAND WIRELESS RF DATA COMMUNICATIONS

FILING FEE RECEIVED		
1026	FEES: Authority has been given in Paper No._____ to charge/credit DEPOSIT ACCOUNT No._____ for following:	☐ All Fees ☐ 1.16 Fees (Filing) ☐ 1.17 Fees (Processing Ext. of time) ☐ 1.18 Fees (Issue) ☐ Other _____ ☐ Credit

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29053 7590 12/07/2010

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(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/095,307	03/11/2002	Randy J. Karr	68144/P009US/10501230	3972

TITLE OF INVENTION: SPECTRUM ALLOCATION SYSTEM AND METHOD FOR MULTI-BAND WIRELESS RF DATA COMMUNICATIONS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	~~YES~~ NO	~~$755~~ $1510	$0	$0	~~$755~~ $1510	03/07/2011

EXAMINER	ART UNIT	CLASS-SUBCLASS
LEVITAN, DMITRY	2461	370-330000

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☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

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(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.
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2 Fulbright & Jaworski L.L.P.
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3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

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(A) NAME OF ASSIGNEE: NETGEAR, Inc.

(B) RESIDENCE: (CITY and STATE OR COUNTRY): San Jose, CA

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☒ Corporation or other private group entity ☐ Government

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☐ Publication Fee (No small entity discount permitted)
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☒ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

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Authorized Signature Robert Greeson Date March 7, 2011

Typed or printed name Robert L Greeson Registration No. 52,966

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Electronic Patent Application Fee Transmittal

Application Number:	10095307
Filing Date:	11-Mar-2002
Title of Invention:	SPECTRUM ALLOCATION SYSTEM AND METHOD FOR MULTI-BAND WIRELESS RF DATA COMMUNICATIONS
First Named Inventor/Applicant Name:	Randy J. Karr
Filer:	David H. Tannenbaum
Attorney Docket Number:	68144/P009US/10501230

Filed as Large Entity

Utility under 35 USC 111(a) Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Utility Appl issue fee	1501	1	1510	1510
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
			Total in USD ($)	1510

Electronic Acknowledgement Receipt

EFS ID:	9601157
Application Number:	10095307
International Application Number:	
Confirmation Number:	3972
Title of Invention:	SPECTRUM ALLOCATION SYSTEM AND METHOD FOR MULTI-BAND WIRELESS RF DATA COMMUNICATIONS
First Named Inventor/Applicant Name:	Randy J. Karr
Customer Number:	29053
Filer:	David H. Tannenbaum
Filer Authorized By:	
Attorney Docket Number:	68144/P009US/10501230
Receipt Date:	07-MAR-2011
Filing Date:	11-MAR-2002
Time Stamp:	15:57:46
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	$1510
RAM confirmation Number	2801
Deposit Account	062380
Authorized User	

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Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		10095307IssueFee.pdf	126210 882058e4a75074.3a6dc88fef15836847cbea bcb8	yes	2

Multipart Description/PDF files in .zip description

Document Description	Start	End
Miscellaneous Incoming Letter	1	1
Issue Fee Payment (PTO-85B)	2	2

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Information:

2	Fee Worksheet (PTO-875)	fee-info.pdf	30406 f943788aa606a99c3f9a76708dc28201e2b9 6fc7	no	2

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Application No. : 10/095,307 Attorney Docket No.: NETP.P0009US.11011206

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Part B-Issue Fee Transmittal (1 page)

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APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/095,307	05/03/2011	7936714	68144/P009US/10501230	3972

29053 7590 04/13/2011

FULBRIGHT & JAWORSKI L.L.P
2200 ROSS AVENUE
SUITE 2800
DALLAS, TX 75201-2784

ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment is 2512 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site http://pair.uspto.gov for additional applicants):

Randy J. Karr, Maple Valley, WA;
Jean-Francois Grenon, Seattle, WA;
Frank D. Cole, Bothell, WA;

To: doipdocket@fulbright.com,,
From: PAIR_eOfficeAction@uspto.gov
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Subject: Private PAIR Correspondence Notification for Customer Number 29053

Apr 14, 2011 08:07:25 AM

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Application	Document	Mailroom Date	Attorney Docket No.
10095307	ISSUE.NTF	04/13/2011	68144/P009US/10501230

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PATENT APPLICATION INFORMATION RETRIEVAL SYSTEM

AO 120 (Rev. 2/99)

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In Compliance with 35 § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court Northern District of California on the following X Patents or ☐ Trademarks:

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
CV 12-01651 JSC	4/3/12	Northern District of California

PLAINTIFF	DEFENDANT
NETGEAR, INC.	HARRIS CORPORATION

	PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1	6,718,030		
2	7,200,400		
3	7,218,722		
4	7,936,714		
5			

In the above—entitled case, the following patent(s) have been included:

DATE INCLUDED	INCLUDED BY ☐ Amendment ☐ Answer ☐ Cross Bill ☐ Other Pleading	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1		
2		
3		
4		
5		

In the above—entitled case, the following decision has been rendered or judgement issued:

DECISION/JUDGEMENT

CLERK	(BY) DEPUTY CLERK	DATE
Richard W. Wieking	Gloria Acevedo	April 6, 2012

Copy 1—Upon initiation of action, mail this copy to Commissioner Copy 3—Upon termination of action, mail this copy to Commissioner
Copy 2—Upon filing document adding patent(s), mail this copy to Commissioner Copy 4—Case file copy

James C. Yoon, State Bar No. 177155
Ryan R. Smith, State Bar No. 229323
Alyssa N. Knutson, State Bar No. 267107
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Telephone: (650) 493-9300
Facsimile: (650) 493-6811
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rsmith@wsgr.com
aknutson@wsgr.com

Attorneys for Plaintiff NETGEAR, Inc.

E-filing

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

NETGEAR, INC., a Delaware corporation, Plaintiff, v. HARRIS CORPORATION, a Delaware corporation, Defendant.	CASE NO.: CV 12-01651 JSC **COMPLAINT FOR PATENT INFRINGEMENT** **DEMAND FOR JURY TRIAL**

Plaintiff NETGEAR, Inc. ("NETGEAR" or "Plaintiff") hereby alleges for its Complaint against defendant Harris Corporation ("Harris" or "Defendant") on personal knowledge as to NETGEAR's own actions and on information and belief as to the actions of others, as follows:

THE PARTIES

1. Plaintiff NETGEAR is a Delaware corporation conducting business in this judicial district and having its principal place of business in San Jose, California.

2. On information and belief, Defendant Harris is a Delaware corporation with its principal place of business in Melbourne, Florida.

JURISDICTION AND VENUE

3. This Court has subject matter jurisdiction of this action pursuant to 28 U.S.C. §§ 1331 and 1338(a), because this action involves a claim arising under the patent laws of the United States, 35 U.S.C. § 1, *et seq.*

4. The Court has personal jurisdiction over Harris, because Harris regularly conducts business in this district, has continuous and systematic contacts within this district, has committed and continues to commit acts of patent infringement in this district, and has harmed and continues to harm NETGEAR in this district by, among other things, offering for sale and selling infringing products and systems in this judicial district. On information and belief, Harris has offices within this judicial district. Thus, Harris has sufficient minimum contacts with this district that an exercise of personal jurisdiction over Harris in this district would not offend traditional notions of fair play and substantial justice.

5. Venue is proper pursuant to 28 U.S.C. §§ 1391 and 1400(b), because, among other things, Harris is subject to personal jurisdiction in this district, committed acts of patent infringement in this district, and continues to commit acts of infringement in this district.

INTRADISTRICT ASSIGNMENT

6. Pursuant to Civil Local Rule 3-5(b), this is an Intellectual Property Action to be assigned on a district-wide basis.

BACKGROUND

7. This case involves four key patents owned by NETGEAR covering wireless systems, such as those used by police, fire, and other public safety agencies. Harris purports to be a leading supplier of such systems, but is not authorized to use any of those four patents. NETGEAR, therefore, brings the following four causes of action against Harris.

FIRST CAUSE OF ACTION - INFRINGEMENT OF THE '030 PATENT

8. NETGEAR restates and re-alleges each of the allegations contained in all preceding paragraphs of this Complaint, and incorporates them as if fully stated herein.

9. NETGEAR is the owner by assignment of U.S. Patent No. 6,718,030 ("the '030 Patent"), entitled "Virtual Private Network System and Method Using Voice of Internet

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Protocol." The '030 Patent issued on April 6, 2004. A true and correct copy of the '030 Patent is attached hereto as Exhibit 1.

10. Harris has infringed and continues to infringe one or more claims of the '030 Patent, by making, using, selling, offering for sale, and/or importing into the United States products and systems including, but not limited to, Harris's VIDA Network and products, the VIDA Telephone Interconnect (VTI), the MASTR III Base Station, and the EDACS MASTR III repeater, without permission of NETGEAR. Harris is, thus, liable for direct infringement of the '030 Patent pursuant to 35 U.S.C. § 271(a).

11. On March 16, 2012, NETGEAR sent Harris's counsel a letter notifying Harris of its infringement of the '030 Patent. On information and belief, Harris has and continues to actively induce third parties (*e.g.*, customers, resellers, and end-users) to directly infringe one or more claims of the '030 Patent and is thus liable for indirect infringement pursuant to 35 U.S.C. § 271(b).

12. Harris has and continues to sell, offer to sell, and/or import into the United States components which constitute a material part of the '030 Patent and lack any substantial non-infringing use. Harris is, therefore, liable for indirect infringement of the '030 Patent pursuant to 35 U.S.C. § 271(c).

13. On information and belief, Harris has had knowledge of the '030 Patent since, at the very latest, March 16, 2012, the date of NETGEAR's letter to Harris's counsel, yet Harris continues to infringe the '030 Patent. Harris's infringement has been, and continues to be, willful under 35 U.S.C. § 284.

14. As a result of Harris's infringement of the '030 Patent, NETGEAR has and will continue to be irreparably injured, and is entitled to recover damages for such injuries pursuant to 35 U.S.C. § 284 in an amount to be determined at trial. NETGEAR is also entitled to injunctive relief.

SECOND CAUSE OF ACTION - INFRINGEMENT OF THE '400 PATENT

15. NETGEAR restates and re-alleges each of the allegations contained in all preceding paragraphs of this Complaint, and incorporates them as if fully stated herein.

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16. NETGEAR is the owner by assignment of U.S. Patent No. 7,200,400 ("the '400 Patent"), entitled "Mobile to 802.11 Voice Multi-Network Roaming Utilizing SIP Signaling With SIP Proxy or Redirect Server." The '400 Patent issued on April 3, 2007. A true and correct copy of the '400 Patent is attached hereto as Exhibit 2.

17. Harris has infringed and continues to infringe one or more claims of the '400 Patent, by making, using, selling, offering for sale, and/or importing into the United States products and systems, including, but not limited to, Harris's VIDA Network and products, the Inter-RF Subsystem Interface (ISSI) Gateway, the Interoperability Gateway, and the UNITY XG-100P Portable Radio, without permission of NETGEAR. Harris is, thus, liable for direct infringement of the '400 Patent pursuant to 35 U.S.C. § 271(a).

18. On March 16, 2012, NETGEAR sent Harris's counsel a letter notifying Harris of its infringement of the '400 Patent. On information and belief, Harris has and continues to actively induce third parties (*e.g.*, customers, resellers, and end-users) to directly infringe one or more claims of the '400 Patent and is thus liable for indirect infringement pursuant to 35 U.S.C. § 271(b).

19. Harris has and continues to sell, offer to sell, and/or import into the United States components which constitute a material part of the '400 Patent and lack any substantial non-infringing use. Harris is, therefore, liable for indirect infringement of the '400 Patent pursuant to 35 U.S.C. § 271(c).

20. On information and belief, Harris has had knowledge of the '400 Patent since, at the very latest, March 16, 2012, the date of NETGEAR's letter to Harris's counsel, yet Harris continues to infringe the '400 Patent. Harris's infringement has been, and continues to be, willful under 35 U.S.C. § 284.

21. As a result of Harris's infringement of the '400 Patent, NETGEAR has and will continue to be irreparably injured, and is entitled to recover damages for such injuries pursuant to 35 U.S.C. § 284 in an amount to be determined at trial. NETGEAR is also entitled to injunctive relief.

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THIRD CAUSE OF ACTION - INFRINGEMENT OF THE '722 PATENT

22. NETGEAR restates and re-alleges each of the allegations contained in all preceding paragraphs of this Complaint, and incorporates them as if fully stated herein.

23. NETGEAR is the owner by assignment of U.S. Patent No. 7,218,722 ("the '722 Patent"), entitled "System and Method For Proving Call Management Services in a Virtual Private Network Using Voice or Video Over Internet Protocol." The'722 Patent issued on May 15, 2007. A true and correct copy of the '722 Patent is attached hereto as Exhibit 3.

24. Harris has infringed and continues to infringe one or more claims of the '722 Patent, by making, using, selling, offering for sale, and/or importing into the United States products and systems, including, but not limited to, Harris's VIDA Network and products, the VIDA Telephone Interconnect (VTI), the P7200 Portable Radio, the OpenSky Network and Products, the MASTR III Base Station, and EDACS MASTR III repeater, without permission of NETGEAR. Harris is, thus, liable for direct infringement of the '722 Patent pursuant to 35 U.S.C. § 271(a).

25. On March 16, 2012, NETGEAR sent Harris's counsel a letter notifying Harris of its infringement of the '722 Patent. On information and belief, Harris has and continues to actively induce third parties (*e.g.*, customers, resellers, and end-users) to directly infringe one or more claims of the '722 Patent and is thus liable for indirect infringement pursuant to 35 U.S.C. § 271(b).

26. Harris has and continues to sell, offer to sell, and/or import into the United States components which constitute a material part of the '722 Patent and lack any substantial non-infringing use. Harris is, therefore, liable for indirect infringement of the '722 Patent pursuant to 35 U.S.C. § 271(c).

27. On information and belief, Harris has had knowledge of the '722 Patent since, at the very latest, March 16, 2012, the date of NETGEAR's letter to Harris's counsel, yet Harris continues to infringe the '722 Patent. Harris's infringement has been, and continues to be, willful under 35 U.S.C. § 284.

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28. As a result of Harris's infringement of the '722 Patent, NETGEAR has and will continue to be irreparably injured, and is entitled to recover damages for such injuries pursuant to 35 U.S.C. § 284 in an amount to be determined at trial. NETGEAR is also entitled to injunctive relief.

FOURTH CAUSE OF ACTION - INFRINGEMENT OF THE '714 PATENT

29. NETGEAR restates and re-alleges each of the allegations contained in all preceding paragraphs of this Complaint, and incorporates them as if fully stated herein.

30. NETGEAR is the owner by assignment of U.S. Patent No. 7,936,714 ("the '714 Patent"), entitled "Spectrum Allocation System and Method For Multi-Band Wireless RF Data Communications." The '714 Patent issued on May 3, 2011. A true and correct copy of the '714 Patent is attached hereto as Exhibit 4.

31. Harris has infringed and continues to infringe one or more claims of the '714 Patent, by making, using, selling, offering for sale, and/or importing into the United States products, including, but not limited to, Harris's UNITY XG-100P Portable Radio, without permission of NETGEAR. Harris is, thus, liable for direct infringement of the '714 Patent pursuant to 35 U.S.C. § 271(a).

32. On March 16, 2012, NETGEAR sent Harris's counsel a letter notifying Harris of its infringement of the '714 Patent. On information and belief, Harris has and continues to actively induce third parties (*e.g.*, customers, resellers, and end-users) to directly infringe one or more claims of the '714 Patent and is thus liable for indirect infringement pursuant to 35 U.S.C. § 271(b).

33. Harris has and continues to sell, offer to sell, and/or import into the United States components which constitute a material part of the '714 Patent and lack any substantial non-infringing use. Harris is, therefore, liable for indirect infringement of the '714 Patent pursuant to 35 U.S.C. § 271(c).

34. On information and belief, Harris has had knowledge of the '714 Patent since, at the very latest, March 16, 2012, the date of NETGEAR's letter to Harris's counsel, yet Harris

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continues to infringe the '714 Patent. Harris's infringement has been, and continues to be, willful under 35 U.S.C. § 284.

35. As a result of Harris's infringement of the '714 Patent, NETGEAR has and will continue to be irreparably injured, and is entitled to recover damages for such injuries pursuant to 35 U.S.C. § 284 in an amount to be determined at trial. NETGEAR is also entitled to injunctive relief.

DEMAND FOR JURY TRIAL

Pursuant to Rule 38(b) of the Federal Rules of Civil Procedure and Rule 3-6(a) of the Local Rules of the United States District Court for the Northern District of California, NETGEAR demands a trial by jury of this action.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff NETGEAR requests entry of judgment in its favor and against defendant Harris as follows:

A. A judgment that Harris has directly infringed, induced infringement, and contributorily infringed one or more claims of each of the '030 Patent, '400 Patent, '722 Patent, and '714 Patent ("Patents-in-Suit");

B. Enjoining Harris and its officers, agents, servants, employees and attorneys, and all persons acting in active concert or participation with it, from further infringing, contributing to and/or inducing infringement of the Patents-in-Suit, in accordance with 35 U.S.C. § 283;

C. Awarding NETGEAR damages in an amount adequate to compensate NETGEAR for Harris's infringement of the Patents-in-Suit, in accordance with 35 U.S.C. § 284;

D. Awarding NETGEAR damages three times the amount found or assessed by virtue of the deliberate and willful nature of Harris's infringement of the Patents-in-Suit, in accordance with 35 U.S.C. § 284;

E. Awarding NEGEAR its costs of suit, including reasonable attorneys' fees; and

F. Granting such other and further relief as this Court may deem just and appropriate.

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