			UNITED STATES DEPAR United States Patent and Address: COMMISSIONER F P.O. Box 1450 Alexandria, Virginia 223 www.uspto.gov	Trademark Office OR PATENTS
APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
90/008,555	04/30/2007	5922695		8170
25000 75	90 12/11/2007		EXAM	INER
GILEAD SCI				
333 LAKESIDI FOSTER CITY			ART UNIT	PAPER NUMBER
	,		DATE MAILED: 12/11/200	7

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



Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450 www.uspto.gov

DO NOT USE IN PALM PRINTER

(THIRD PARTY REQUESTER'S CORRESPONDENCE ADDRESS)

DAVID B. RAVICHER PUBLIC PATENT FOUNDATION, INC 1375 BROADWAY, SUITE 600 NEW YORK, NY 10018

EX PARTE REEXAMINATION COMMUNICATION TRANSMITTAL FORM

REEXAMINATION CONTROL NO. 90/008,555.

PATENT NO. <u>5922695</u>.

ART UNIT <u>3991</u>.

Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above identified *ex parte* reexamination proceeding (37 CFR 1.550(f)).

Where this copy is supplied after the reply by requester, 37 CFR 1.535, or the time for filing a reply has passed, no submission on behalf of the *ex parte* reexamination requester will be acknowledged or considered (37 CFR 1.550(g)).

		Control No. 90/008,555	Patent Under Re 5922695	examination
Offic	ce Action in Ex Parte Reexamination	Examiner Gary L. Kunz	Art Unit 3991	
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address			
a⊠ Re c⊡ A s	esponsive to the communication(s) filed on <u>23 March 2</u> statement under 37 CFR 1.530 has not been received	007 . b This action is made from the patent owner.	FINAL.	
Failure f certifica	ened statutory period for response to this action is set to respond within the period for response will result in te in accordance with this action. 37 CFR 1.550(d). Ex priod for response specified above is less than thirty (3 considered timely.	termination of the proceeding and issu XTENSIONS OF TIME ARE GOVERN	ance of an <i>ex par</i> l ED BY 37 CFR 1.	550(c).
Part I	THE FOLLOWING ATTACHMENT(S) ARE PART OF	THIS ACTION:		
1.	Notice of References Cited by Examiner, PTO-8	92. 3. 🗌 Interview Summa	ry, PTO-474.	
2.	. Information Disclosure Statement, PTO/SB/08. 4.			
Part II	SUMMARY OF ACTION			
1a.	Claims <u>1-31</u> are subject to reexamination.			
1b.	1b. Claims are not subject to reexamination.			
2.	2. Claims have been canceled in the present reexamination proceeding.			
3.	Claims are patentable and/or confirmed.			
4.	4. 🔀 Claims <u>1-31</u> are rejected.			
5.	5. Claims are objected to.			
6.	6. 🔲 The drawings, filed on are acceptable.			
7. 🔲 The proposed drawing correction, filed on has been (7a) approved (7b) disapproved.				
8. 🔲 Acknowledgment is made of the priority claim under 35 U.S.C. § 119(a)-(d) or (f).				
a) All b) Some* c) None of the certified copies have				
	1 been received.			
	2 not been received.			
	3 been filed in Application No			
	4 been filed in reexamination Control No.			
5 been received by the International Bureau in PCT application No.				
* See the attached detailed Office action for a list of the certified copies not received.				
 9. Since the proceeding appears to be in condition for issuance of an <i>ex parte</i> reexamination certificate except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte</i> Quayle, 1935 C.D. 11, 453 O.G. 213. 				
10.	. 🔲 Other:			
	lester (if third party requester)			
PTOL-466	(Rev. 08-06) Office Action in	Ex Parte Reexamination	Part of Paper No	o. 20071206-BB

.

.

EX PARTE REEXAMINATION

Delailed Non-Final Rejection

Procedural Posture

On 30 April 2007 a Third Party Requester filed a request for ex parte

reexamination of claims 1 - 31 of United States Patent Number 5,922,695 (Arimilli '695).

On 13 July 2007 an Order granting ex parte reexamination was mailed.

No response was received from the Patent Owner under 37 CFR §1.530.

Status of the Claims

In the Arimilli '695 patent 31 claims are present and claim 1 is the sole

independent claim.

Claim 1. A compound having formula (1a)

wherein

Z is independently -----OC(R^2)₂OC(O)X(R)_a, an ester, an amidate or --H, but at least one Z is ---OC(R^2)₂OC (O)X(R)_a;

A is the residue of an antiviral phosphonomethoxy nucleotide analog;

X is N or O;

 R^2 independently is --H, C₁-C₁₂ alkyl, C₅-C₁₂ aryl, C₂-C₁₂ alkenyl, C₂-C₁₂ alkynyl, C₇-C₁₂ alkynylaryl, C₇-C₁₂ alkynylaryl, or C₆-C₁₂ alkaryl, any one of which is unsubstituted or is substituted with I or 2 halo, cyano, azido, nitro or ---OR³ in which R³ is C₁-C₁₂ alkyl, C₂-C₁₂ alkynyl or C₅-C₁₂ aryl;

Page 3

R is independently --H, C_1 -- C_{12} alkyl, C_5 - C_{12} aryl, C_2 - C_{12} alkenyl, C_2 - C_{12} alkynyl, C_7 - C_{12} alkynylaryl, C_7 - C_{12} alkynylaryl, or C_6 - C_{12} alkaryl, any one of which is unsubstituted or is substituted with 1 or 2 halo, cyano, azido, nitro, --N(R⁴)₂ or --OR³, where R⁴ independently is --H or C_1 -- C_8 alkyl, provided that at least one R is not H; and

a is 1 when X is O, or 1 or 2 when X is N;

with the proviso that when a is 2 and X is N, (a) two N-linked R groups can be taken together to form a carbocycle or oxygen-containing heterocycle, (b) one N-linked R additionally can be --OR³ or (c) both N-linked R groups can be --H;

and the salts, hydrates, tautomers and solvates thereof.

The other 30 claims depend from claim 1 and are directed to more specific compounds

or methods of preparing such compounds, except claim 25, which is directed to a

method of orally administering to a patient infected with a virus, a compound of claim 1.

Priority

U.S. Patent Number 5,922,695 issued from application 08/900,746, filed 25 July 1997 and claims the benefit under 35 USC 119(e) of provisional application number 60/022,708 filed 26 July 1996.

In order for a patent to gain the benefit of priority under 35 USC §119(e), the provisional application must fully comply with 35 USC §112, first paragraph. This means that the provisional application must provide enablement and adequate written description for all 31 claims of the Arimilli '695 patent. In this instance, the provisional application 60/022,708 fails to provide adequate written description for claims 1 - 25 of the Arimilli '695 patent. (See *Univ. of Rochester v. G.D. Searle & Co.*, 358 F.3d 916, 922 (Fed. Cir. 2004). To satisfy the written description requirement, a specification must describe the claimed invention so that one of ordinary skill in the art at the time of

the invention would have recognized what is claimed. In addition, the provisional application must provide sufficient detail in the specification to show one of ordinary skill in the art that the Patent Owner possessed the claimed invention at the time of the filing of the application. The provisional application 60/022,708 ('708) fails to provide the necessary written description of the claimed inventions of Arimilli '695 for the following reasons.

The following parts of claim 1 of Arimilli '695 are not supported by the '708 provisional application:

(1) Regarding variable Z, the general terms of an "**ester**" and an "**amidate**" in the definition of variable Z in the Arimilli '695 patent are not present in the definition of Z in the '708 provisional application. Furthermore, Formula Ia of the '708 provisional application shows **one** \mathbb{R}^2 variable within variable Z while the Arimilli '695 patent contains **two** " \mathbb{R}^2 's" within the variable Z.

(2) Regarding the definition of variable R in claim 1, the specific carbon limits of **C5-C12** aryl, **C2-C12** alkenyl, **C2-C12** alkynyl, **C7-C12** alkenylaryl, **C7-C12** alkynylaryl, or **C6-C12** alkaryl are not found in the '708 provisional application.

(3) Regarding the definition of variable R^2 in claim 1, the specific carbon limits of the **C5-C12** alkenyl, **C2-C12** alkynyl, **C7-C12** alkenylaryl, **C7-C12** alkynylaryl, or **C6-C12** alkaryl are not described in the '708 application. The '708 application also fails to describe **cyano** as a substitutent for R^2 . Finally, the '708 application fails to teach that R^2 can be --**N**(R^4)₂. See page 2, lines 4 - 6 and 28 and page 36, lines 12 - 14 of the '708 provisional application.

Page 4

(4) Regarding the definition of variable R³ in claim 1, **C2-C12 alkenyl, C2-C12 alkynyl, and C5-C12 aryl** are unsupported new matter with respect to the '708 provisional application.

(5) Regarding the definition of variable R^4 in claim 1, this variable does not even

appear in the '708 provisional application.

(6) Variable "n" in claim 1 is absent from Formula 1a in the Arimilli '230 patent.

The following table provides a variable by variable comparison of claim 1 of

Arimilli '695 versus the '708 provisional application. The bold font represents

information that is present in claim 1 of the Arimilli '695 patent and absent from the

definition of Formula la in the provisional '708 application.

VARIABLE	PROVISIONAL '708	'695 PATENT Claim 1
Formula 1a	A(Z)n	O !! AO-CH2 - P - (Z)2
A	"A" is the residue of an antiviral phosphonomethoxy nucleotide analog." Therefore "A" represents	"A" is the residue of an antiviral phosphonomethoxy nucleotide analogue." Therefore, "A" represents BaseW
· · ·	O !! Base - W - O - CH2 - P - O - Where "W" is an unspecified linkage between phosphono- methoxy and the base	Where "W" is an unspecified linkage between phosphono- methoxy and the base

x	O or N	O or N
Z	Independently	Independently
	CH(R ²)OC(O)X(R)a or H, but at	OC(R ²) ₂ OC(O)X(R)a, an ester,
	least one Z is	an amidate or H, but at least one
	CH(R ²)OC(O)X(R)a	Z isOC(R ²)OC(O)X(R)a
R ²	Independently H, C1-C12 alkyl, aryl, alkenyl, alkynyl, alkyenylaryl, alkynylaryl, alkaryl, arylalkynyl, arylalkenyl or arylalkyl which is unsubstituted or substituted with halo, azido, nitro, or OR3 in which R3 is C1-C12 alkyl	IndependentlyH, C1-C12 alkyl, C5 - 12 aryl, C2-C12 alkenyl, C2- C12 alkynyl, C7-C12 alkyenylaryl, C7-C12 alkynylaryl, or C6-C12 alkaryl, any one of which is unsub- stituted or substituted with 1 or 2 halo, cyano, azido, nitro,OR3
R ³	C1-12alkyl Page 2, line 6; page 36, line 11	C1-C12 alkyl, C2-C12 alkenyl, C2-C12 alkylnyl, or C5-C12 aryl
R	Independently H, C1-C12 alkyl, aryl, alkenyl, alkynyl, alkyenylaryl, alkynylaryl, alkaryl, arylalkynyl, arylalkenyl or arylalkyl which is unsubstituted or substituted with halo, azido, nitro, or OR3, provided that at least one R is not H; Page 2 lines 7 - 9; page 5, lines 7 - 33; page 36, lines 15 - 17	IndependentlyH, C1-C12 alkyl, C5 - 12 aryl, C2-C12 alkenyl, C2- C12 alkynyl, C7-C12 alkyenylaryl, C7-C12 alkynylaryl, or C6-C12 alkaryl, any one of which is unsub- stituted or substituted with 1 or 2 halo, cyano, azido, nitro,N(R4)2, orOR3
R⁴	R ⁴ is not mentioned in the '708 provisional specification	independentlyH or C1-C8 alkyl, provided that at least one R is not H; and a is 1 when X is O, or 1 or 2 when X is N

а	1 or 2	1 or 2
n	1 or 2	"n" not present
proviso	With the proviso that then a is 2 and X is N, (a) two R groups can be taken together to form a carbocyle or oxygen-containing heterocycle, or (b) one R additionally can beOR ³ page 2, lines 12 - 14; page 36, lines 20 - 22	With the proviso that when a is 2 and X is N, (a) two N-linked R groups can be taken together to form a carbocycle or oxygen- containing hetercycle; (b) one N- linked R additional can beOR ³ ; or (c) both N-linked R-groups can beH.

Regarding the proviso when "a" is 2 and X is "N" in claim 1 of Arimilli '695, the phrase "both N-linked R-groups can be hydrogen" is not present in the '708 provisional application.

For all of the above reasons, the invention of claims 1 - 25 of the Arimilli '695 patent are not fully described in the '708 provisional application, and therefore, do not receive benefit of the earlier filing date under 35 USC §119(e). Thus, claims 1 - 25 of the Arimilli '695 patent have a priority date that is the filing date of the parent application 08/990,746: July 25, 1997. Claims 26 - 31 are fully supported by the '708 provisional application and are, accordingly, given the benefit of the filing date of this provisional application under 35 USC 119(e): 26 July 1996.

Claim Rejections

Claim Rejection - 35 USC §102(a)

The following is a quotation of the appropriate paragraphs of 35 U.S.C. §102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1 - 5, 9, 19 - 21 and 25 are rejected under 35 USC §102(a) as being clearly anticipated by Bischofberger et al. "Bis(POC)PMPA, an orally bioavailable prodrug of the antiviral agent PMPA," Abstract No. 214, 4th Conference on Retroviruses and Opportunistic Infections, Washington, D.C., January 22 - 26, 1997.

Claims 1 - 5, 9 and 19 - 21 are directed to a carbonate ester prodrug of an

antiviral phosphonomethoxy nucleotide analog. Claim 25 is directed to a method of

administering the prodrug of claim 1 to a patient infected with a virus or at risk of viral

infection.

One of the preferred carbonate prodrugs is shown in Arimilli '695 at Example 16.

and Table 2 in column 60 as compound 5f: bis(isopropyloxy carbonyloxymethyl) 9-[(R)-

2-(phosphonomethoxy)propyl]adenine, also known as bis(POC)PMPA. Formula la of

claims 1, 5 and 9 become bis(POC)PMPA when:

"A" is 9-[(R)-2-(phosphomethoxy)propyl]adenine

"Z" is --OCH₂OC(O)OCH(CH₃)₂

"X" is oxygen

"R" is isopropyl

"R²" is hydrogen

Claims 2 - 4 and 19 - 21 become bis(POC)PMPA when:

B is adenin-9-yl

R¹ is methyl

R² is hydrogen

 R^8 is --CHR²-O-C(O)-OR

R is isopropyl

As explained previously in the "Priority" discussion, the effective priority of claims 1 - 25 of the Arimilli '695 patent is July 25, 1997 because the entire claim was not fully described by the '708 provisional application. Therefore, the Bischofberger et al. Abstract of January 22, 1997 becomes intervening prior art under 35 USC §102(a).

The Bischofberger et al. abstract discloses one of the Patent Owner's preferred carbonate prodrugs, Bis(POC)PMPA, and the method of contacting a cell with this compound to inhibit viral infections. This disclosure reads on claims 1 - 5, 9, 19 - 21, and 25 of the Arimilli '695 patent. Thus, Bischofberger et al. clearly anticipates claims 1-5, 9, 19 - 21, and 25 of the Arimilli '695 patent.

Claim Rejection - 35 USC §103(a)

The following is a quotation of 35 U.S.C. §103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 6 - 8, 10 - 18, 22 - 24, and 26 - 31 are rejected under 35 U.S.C. §103(a) as being unpatentable over **Holy et al.** (EP 0 206 249 B1) in view of **Jones et al.**

("Minireview: Nucleotide Prodrugs," Antiviral Research, 27: 1017, 1995) and **Notari** ("Prodrug Design," Pharmaceutical Therapy, 14: 25 - 53, 1981) and further in view of the Patent Owner admission at col. 3, line 67 to col. 4, line 2.

Claims 6 - 8, 10 - 18, and 22 - 24 are directed to carbonate ester prodrugs of phosphonomethoxy nucleotide analogs. Claims 26 - 31 are directed to a method of preparing the carbonate ester prodrugs of claims 1 - 24.

The Arimilli '695 patent admits that "the parental compounds have the structure $AOCH_2P(O)(OH)_2$ [and they were] well known and have demonstrated antiviral activity" (col. 3, line 67 to col. 4, line 2). Arimilli '695 lists fourteen patents and published patent applications which support this concession at column 4, lines 6 - 10. More specifically, Holy et al. discloses specific antiviral phosphonomethoxyalkyl adenine derivatives which exhibit antiviral activity against DNA-viruses and Mononey sarcoma virus (page 4, lines 27 - 30). In Example 2 on page 5 Holy et al. disclose the specific antiviral compound 9-(3-phosphonyl-methoxypropyl)adenine.

Holy et al. are silent about any prodrugs of the antiviral compounds they disclose.

However, Jones et al. teach that nucleotides (which include 9-(3-phosphonylmethoxypropyl)adenine) exhibit the disadvantage of being unable to efficiently penetrate the lipid membrane surrounding cells because of the charge on the phosphonic moiety. This problem leads to a poor oral bioavailability (page 4, first paragraph). Jones et al. further explain that nucleotide prodrugs can potentially overcome these difficulties (page 4, second paragraph):

Masking the negative charge(s) on the phosphorus by suitable functionalities, which can be converted chemically or biologically to the parent nucleotide, can make nucleotides

Page 11

Application/Control Number: 90/008,555 Art Unit: 3991

> orally bioavailable, increase intracellular delivery, and alter pharmacokinetics/ tissue distribution/ metabolism resulting in improved efficacy and target organ specificity.

As an additional benefit, prodrugs may reduce the toxicity of a particular nucleotide

analog and enhance its intracellular stability (page 11, third paragraph). Jones et al.

continue at page 27:

Nucleoside and nucleotide analogues have great therapeutic potential for the treatment of viral diseases and cancer. [] The area of nucleotide analogues has received a lot of attention recently due to the discovery of nucleotides with potent antiviral activities (Holy, 1993). Since the negative charge(s) on the phosphorus entail(s) nucleotides with shortcomings (low permeability and bioavailability), increasing work in the literature is focusing on overcoming these difficulties with nucleotide prodrugs [.]

Jones et al. specifically teach bis(acyloxymethyl) esters of (phosphonomethoxy)ethyl adenine (PMEA) at page 5, lines 7 - 11 which exhibit increased oral bioavailability. Jones et al. also discuss the use of phosphoramidates as nucleotide prodrugs (page 7, third paragraph). Thus, Jones et al. establish that increased bioavailability of an antiviral drug is compelling motivation to prepare and use neutral prodrugs of therapeutic nucleotides.

Jones et al. are silent about the use of carbonate ester prodrugs of nucleotide analogues.

However, Notari teaches that known drugs with disadvantages such as undesirable stability or solubility could be improved through the creation of a prodrug and that "possible enzyme-reversible prodrug linkages [include] . . . carbonate esters [and] carbamates." Notari further discloses at page 27, second paragraph:

> Although the list [of possible enzyme-reversible prodrug linkages] is short [,] the list of prodrug linkages commonly employed is much shorter. By far the most widely used prodrug linkage is that of an ester wherein the original drug provides either the carboxylic acid or hydroxyl group. Add to this the phosphates, <u>carbonates</u> and hemiesters and one has accounted for the large majority of prodrugs. (Emphasis added.)

Therefore, it would have been obvious to the person of ordinary skill in the art at the time of the invention to have prepared bis-carbonate prodrugs of 9-(phosphonomethoxy)propyl adenine by combining the antiviral compound disclosed by Holy et al., with the carbonate prodrugs taught by Notariet al.for the purpose as set forth by Jones et al.: a reasonable expectation of improving the bioavailability of the antiviral drug. The simplest carbonate esters would have been the most obvious where both of the hydroxyls of the phosphonic group are blocked by the smallest and simplest carbonate ester group: --CH₂-O-C(O)-O-CH₃. Furthermore, it would have been obvious to substitute the hydrogen atoms in the carbonate structure with any alkyl or other neutral moiety that would not create steric interference in the enzymatic hydrolysis of said carbonate linkage. A method of using obvious prodrugs to treat cells infected by a virus would also have been obvious to the artisan at the time of the invention. Finally, the method of preparing said carbonate esters by the traditional S_N2 displacement reaction involving a leaving group displaced by a hydroxyl group is routine in the art of blocking hydroxyl groups.

Conclusion

Claims 1 - 31 of the Arimilli '695 patent are rejected.

Continuing Duty to Disclose

The patent owner is reminded of the continuing responsibility under 37 CFR §1.565(a) to apprise the Office of any litigation activity, or other prior or concurrent proceeding, involving Patent No. 6,922,695 throughout the course of this reexamination proceeding. The third party requester is also reminded of the ability to similarly apprise the Office of any such activity or proceeding throughout the course of this reexamination proceeding. See MPEP §§ 2207, 2282, and 2286.

Patent Owner Amendment

Patent owner is notified that any proposed amendment to the specification and/or claims in this reexamination proceeding must comply with 37 CFR §1.530(d)-(j), must be formally presented pursuant to 37 CFR §1.52(a) and (b), and must contain any fees required by 37 CFR 1.20(c). In order to ensure full consideration of any amendments, affidavits or declarations, or other documents as evidence of patentability, such documents must be submitted in response to this Office action. Submissions after the next Office action, will be governed by requirements of 37 CFR §1.116, after final rejection and 37 CFR §41.33 after appeal, which will be strictly enforced.

Extensions of Time

Extensions of time under 37 CFR §1.136(a) will not be permitted in these proceedings because of the provisions of 37 CFR §1.136 apply only to an applicant and not to parties in a reexamination proceeding. Additionally, 35 USC §305 requires that *ex parte* reexamination proceedings "will be concluded with special dispatch" (37 CFR §1.550(a). Extensions of time in *ex parte* reexamination proceedings are provided for in 37 CFR §1.550(c).

Service on the Other Party (3rd Party Request)

After the filing of a request for reexamination by 3rd party requester, any document filed by either the patent owner or the third party requester must be served on the other party (or parties where two or more third party requester proceedings have

been merged) in the reexamination proceedings in the manner provided in 37 CFR §1.248. See 37 CFR §1.530(f).

NOTICE RE PATENT OWNER'S CORRESPONDENCE ADDRESS

Effective May 16, 2007, 37 CFR 1.33(c) has been revised to provide that:

The patent owner's correspondence address for all communications in an *ex parte* reexamination or an *inter partes* reexamination is designated as the correspondence address of the patent.

Revisions and Technical Corrections Affecting Requirements for Ex Parte and Inter Partes Reexamination, 72 FR 18892 (April 16, 2007)(Final Rule)

The correspondence address for any pending reexamination proceeding not having the same correspondence address as that of the patent is, by way of this revision to 37 CFR 1.33(c), <u>automatically changed to that of the patent file</u> as of the effective date.

This change is effective for any reexamination proceeding which is pending before the Office as of May 16, 2007, <u>including the present reexamination proceeding</u>, and to any reexamination proceeding which is filed after that date.

Parties are to take this change into account when filing papers, and direct communications accordingly.

In the event the patent owner's correspondence address listed in the papers (record) for the present proceeding is different from the correspondence address of the patent, it is strongly encouraged that the patent owner affirmatively file a Notification of Change of Correspondence Address in the reexamination proceeding and/or the patent (depending on which address patent owner desires), to conform the address of the proceeding with that of the patent and to clarify the record as to which address should be used for correspondence.

Telephone Numbers for reexamination inquiries:

Reexamination and Amendment Practice	(571) 272-7703
Central Reexam Unit (CRU)	(571) 272-7705
Reexamination Facsimile Transmission No.	(571) 273-9900

Page 15

Application/Control Number: 90/008,555 Art Unit: 3991

Further Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary L. Kunz, whose telephone number is 571-272-0887. The examiner can normally be reached on Monday through Friday (with alternative Fridays off) between 9:30 AM and 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones, can be reached at 571-272-1535. The fax phone number for the organization where this application or proceeding is assigned is 571-273-9900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for unpublished applications my 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 <u>http://pair-direct.uspto.gov</u>. Should you have questions about access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

All correspondence relating to this Ex parte Reexamination proceeding should be directed to:

By Mail to:

Attn: Mail Stop "Ex Parte Reexam" Central Reexamination Unit Commissioner of Patents P.O. Box 1450 Alexandria, VA 22313-1450

By FAX to:

(571) 273-9900 Central Reexamination Unit

Page 16

1

Application/Control Number: 90/008,555 Art Unit: 3991

By hand to:

Customer Service Window Randolph Building 401 Dulany Street Alexandria VA 22314

Conferee:

Olbar SÆ 29

Conferee:

er CRU 3991

d Kunz au Garív Kunz

Primary Examiner Art Unit 3991

GARY L. KUNZ PRIMARY EXAMINER CRU - AU 3991