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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,629	11/04/2002	Roman Chistyakov	ZON-002	4225
23701 7.	590 10/07/2003		EXAM	INER
RAUSCHENBACH PATENT LAW GROUP, LLC P.O. BOX 387			LEE, WILSON	
BEDFORD, M	IA 01730		ART UNIT	PAPER NUMBER
			2821	

DATE MAILED: 10/07/2003

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



**INTEL 1209** 

<u>.</u>		9.20~	
•	Application No.	Applicant(s)	
	10/065,629	CHISTYAKOV, ROMAN	
Office Action Summary	Examiner	Art Unit	
	Wilson Lee	2821	
The MAILING DATE of this communication Period for Reply	appears on the cover sheet w	ith the correspondence address	
A SHORTENED STATUTORY PERIOD FOR RI THE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication.  If the period for reply specified above is less than thirty (30) days,  If NO period for reply is specified above, the maximum statutory provided to the provided period for reply will, by second provided period for reply will, by second patent term adjustment. See 37 CFR 1.704(b).  Status	ON. FR 1.136(a). In no event, however, may a n. a reply within the statutory minimum of thi eriod will apply and will expire SIX (6) MO statute, cause the application to become A	reply be timely filed rty (30) days will be considered timely. NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).	
1) Responsive to communication(s) filed on	04 November 2002 .		
2a) This action is <b>FINAL</b> . 2b)⊠	This action is non-final.		
3) Since this application is in condition for al closed in accordance with the practice un Disposition of Claims			
4) Claim(s) 1-44 is/are pending in the application	ation.		
4a) Of the above claim(s) is/are with			
5) Claim(s) is/are allowed.			
6) Claim(s) 1-24,26,31-33,35-37,41,43 and 4	14 is/are rejected.		
7) Claim(s) <u>25,27-30,34,38-40 and 42</u> is/are	objected to.		
8) Claim(s) are subject to restriction a	nd/or election requirement.		
Application Papers			
9)☐ The specification is objected to by the Exar	miner.		
10)⊠ The drawing(s) filed on <u>04 November 2002</u>	is/are: a)□ accepted or b)⊠ o	objected to by the Examiner.	
Applicant may not request that any objection			
11)☐ The proposed drawing correction filed on _	is: a)□ approved b)□	disapproved by the Examiner.	
If approved, corrected drawings are required	• •		
12) ☐ The oath or declaration is objected to by th	e Examiner.		
Pri rity under 35 U.S.C. §§ 119 and 120			
13) Acknowledgment is made of a claim for fo	reign priority under 35 U.S.C.	§ 119(a)-(d) or (f).	
a) All b) Some * c) None of:			
<ol> <li>Certified copies of the priority docur</li> </ol>	ments have been received.		
<ol><li>Certified copies of the priority docur</li></ol>	ments have been received in	Application No	
<ul><li>3. Copies of the certified copies of the application from the Internationa</li><li>* See the attached detailed Office action for a</li></ul>	al Bureau (PCT Rule 17.2(a)).		
14) Acknowledgment is made of a claim for don	nestic priority under 35 U.S.C	. § 119(e) (to a provisional application).	
a) ☐ The translation of the foreign language 15)☐ Acknowledgment is made of a claim for dor			



Attachment(s)

4) Interview Summary (PTO-413) Paper No(s).
5) Notice of Informal Patent Application (PTO-152)

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### **Drawings**

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the second volume of feed gas, third volume of feed gas, a means for exchanging the strongly-ionized plasma, a gas exchange means for exchanging the weakly-ionized plasma must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

#### Claim Rejections - 35 U.S.C. 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-21, 43 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

In regard to Claims 1, 3, 10, 12 and 43, a second volume of feed gas, a third volume of feed gas, a means for exchanging the strongly-ionized plasma and a means for exchanging weakly-ionized plasma have not been disclosed in the specification to enable one skilled in the art to make or use the invention. Applicant is respectfully



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requested to point out the above limitations shown in the specification if examiner overlooked the disclosure.

Claims 2-9 and 11-21 are vague by virtue of their dependency on claims 1 and 10

### Claim Rejections – 35 U.S.C. 102

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 -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4-11, 19, 20, 22-24, 26, 31-33, 35-37, 41, 43, 44, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Koloc (5,041,760).

In regard to Claim 1, Koloc discloses an apparatus for generating a strongly-ionized plasma, the apparatus comprising:

- an ionization source (18 in figure 1) that generates a weakly-ionized plasma (plasma at the pre-ionization region 62 in figure 8) from a volume of feed gas (from gas source 88 in figure 9);
- a power supply (46) that applies an electrical pulse across the weakly-ionized plasma to generate the strongly-ionized plasma (See Col. 5, lines 1-37, Col. 13, lines 39-59); and
- a means (power supply 80 in figure 9 or high voltage source 16 in figure 1) for exchanging the strongly-ionized plasma with a second volume of feed gas



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(from gas source 88 in figure 9) while applying the electrical pulse (intensive pulsed electric field to produce a high stressed voltage condition. See Col. 14, lines 27-56) across the second volume of feed gas to generate an additional strongly-ionized plasma.

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In regard to Claim 2, Koloc discloses that the power supply (80 or 16) applies the electrical pulse across the weakly-ionized plasma to excite atoms in the weakly-ionized plasma and to generate secondary electrons, the secondary electrons inherently ionizing the excited atoms, thereby creating the strongly-ionized plasma (See Col. 5, line 53 to Col. 6, line 6.

In regard to Claims 4 and 5, Koloc discloses the power supply inherently generates a constant power and a constant voltage since the power source must constantly generate power or voltage to the ion source in order to generate plasma.

In regard to Claim 6, Koloc discloses that the ionization source is an X-ray source, an electron beam source, or an ion beam source (See Col. 7, lines 3-11).

In regard to Claim 7, Koloc discloses that a magnet (36) that is positioned to generate a magnetic field (flux 34) proximate to the weakly-ionized plasma, the magnetic field trapping electrons in the weakly-ionized plasma.

In regard to Claim 8, Koloc discloses that the magnet comprises an electro-magnet since it receives electricity or plasma from electrode 76 and plasma gun (70) (See Figure 9).

In regard to Claim 9, Koloc discloses the magnet is movable since it is not physically connected to anything shown in figure 9.



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