IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

AMGEN INC. and AMGEN MANUFACTURING LIMITED, Plaintiffs, v. COHERUS BIOSCIENCES INC., Defendant.	)	C.A. No. 17-546 (LPS) (CJB) REDACTED - PUBLIC VERSION

AMGEN'S OBJECTIONS TO DECEMBER 7, 2017 REPORT AND RECOMMENDATION [D.I. 50]

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I. INTRODUCTION

Plaintiffs Amgen Inc. and Amgen Manufacturing Limited (collectively, "Amgen") respectfully object to the Magistrate Judge's Report and Recommendation (the "Report") to grant with prejudice Defendant Coherus's Motion to Dismiss under Federal Rule of Civil Procedure 12(b)(6). *See* 28 U.S.C. § 636(b); Fed. R. Civ. P. 72(b); D. Del. LR 7.1.5(b), 72.1(b). The Magistrate Judge found that prosecution history estoppel bars Amgen from asserting infringement under the doctrine of equivalents with respect to salt pairs other than those listed in the claims (that is, citrate and sulfate, citrate and acetate, and sulfate and acetate). D.I. 50 at 17. The Magistrate Judge recommended dismissal with prejudice because Amgen did not seek leave to amend in the event of a dismissal and because amendment would be futile in light of the finding that Amgen's infringement claim is estopped as a matter of law. *Id.* at 18 n.12.

Amgen respectfully objects because the Report misinterprets portions of the prosecution history, erroneously finding that Amgen "clearly and unmistakably" surrendered claim scope in its statements to the patent examiner, and because the Report rests on a premature determination of the scope of the asserted claims before the Court has had the benefit of the resolution of factual disputes based on a developed record. Specifically, the Report misinterprets Amgen's arguments as addressing processes using particularly enumerated salt combinations, rather than processes using salt combinations that confer particular results (that is, increased dynamic capacity of the column). Moreover, because of the constraints placed on pleadings by the Biologics Price Competition and Innovation Act ("BPCIA"), Amgen's pleading contains as much factual support as permitted. Even if the Court finds Amgen's pleading factually insufficient, Amgen should be permitted to file an amended complaint under seal to address any shortcomings. Accordingly, the Court should reject the Report.

II. BACKGROUND

This case arises under the BPCIA, which provides an abbreviated pathway for FDA approval of follow-on biologic drug products that are deemed "biosimilar" to an already-licensed reference biological drug product. *See* 42 U.S.C. § 262(k). The BPCIA also sets out an information exchange process and framework to litigate patent infringement claims by the reference product license holder (the "reference product sponsor"). Under the BPCIA process, the biosimilar applicant ("subsection (k) applicant") provides confidential access to its abbreviated Biologics License Application ("aBLA") and other manufacturing information so that the reference product sponsor can determine "whether a claim of patent infringement could reasonably be asserted." *Id.* § 262(*l*)(1)-(2). The BPCIA expressly forbids a reference product sponsor from including the confidential information that the subsection (k) applicant provides under section 262(*l*)(2) in "any publicly-available complaint or other pleading." *Id.* § 262(*l*)(1)(F); *see also Sandoz Inc. v. Amgen Inc.*, 137 S. Ct. 1664, 1671 (2017) ("The information the applicant provides is subject to strict confidentiality rules, enforceable by injunction.").

Amgen asserts that Coherus's proposed pegfilgrastim biosimilar product infringes claims of U.S. Patent No. 8,273,707 ("the '707 Patent"), which is directed to a process for purifying proteins using hydrophobic interaction chromatography ("HIC"). A key inventive aspect of the '707 Patent is the use of a combination of a first salt and a second salt that, acting together, "increase the dynamic capacity of the HIC column for a particular protein." *See* '707 Patent, D.I. 1-1, at 5:26-28. In summarizing their invention, the inventors emphasizes two features that distinguished their purification method from the prior art: (1) that a combination of salts, not a single salt, is used, and (2) that using two salts resulted in increased dynamic binding capacity of the HIC column compared to the use of a single salt. *Id.* at 2:9-16. Specifically, the inventors

stated that: "The present invention provides combinations of salts useful for increasing the dynamic capacity of an HIC column [for a particular protein] compared with the dynamic capacity of the column using separate salts alone." *Id.* at 2:9-12; *see also id.* at 2:39-42. The independent claims (1 and 10) of the '707 Patent state that "the first and second salts are selected from the group consisting of citrate and sulfate, citrate and acetate, and sulfate and acetate, respectively."[1] The recitation of these salt pairs was never amended during prosecution; the foregoing salt pairs were in the claims as filed in the application that matured into the '707 Patent. *See* Notice of Allowance, attached as Exh. 1, at 2-3.

As described in its aBLA, Coherus uses a preparation containing [redacted] *Id.* In its Complaint, Amgen pleads that Coherus's combination of salts is equivalent to the combinations listed in the claims of the '707 Patent, and Coherus thus infringes the '707 Patent under the doctrine of equivalents. D.I. 1 at ¶ 50.

[1] In the Report, the Magistrate Judge addresses only this "salt pairing limitation." D.I. 50 at 5. The Magistrate Judge does not address infringement with respect to any other limitation. *Id.*

III. LEGAL STANDARD

This Court reviews objections to a magistrate judge's legal conclusions in dispositive matters *de novo*. 28 U.S.C. § 636(b)(1)(C); Fed. R. Civ. P. 72(b)(3); *Masimo Corp. v. Philips Elec. N. Am. Corp.*, 62 F.Supp.3d 368, 379 (D. Del 2014). This Court can dismiss under Rule 12(b)(6) only if, after accepting all well-pleaded allegations in the complaint as true, and viewing them in the light most favorable to plaintiff, plaintiff is not entitled to relief. *See, e.g.*, *IP Commc'n Sols., LLC v. Viber Media (USA) Inc.*, C.A. No. 16-134-GMS, 2017 WL 1312942, at *1-*2 (D. Del. Apr. 5, 2017) (citing *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009) and *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 556 (2007)). A patentee should be allowed an opportunity to show evidence to support its case. *Advanced Cardiovascular Sys., Inc. v. SciMed Life Sys., Inc.*, 988 F.2d 1157, 1160–61 (Fed. Cir. 1993) (vacating dismissal of patent infringement claim).

Prosecution history estoppel can occur in two ways: (1) by making a narrowing amendment to a claim or (2) by surrendering claim scope through argument to the patent examiner. The latter argument-based prosecution history estoppel applies only when the prosecution history "[e]vinces a clear and unmistakable surrender of the subject matter" and does not apply to clarifying statements. *Intendis GmbH v. Glenmark Pharms. Inc., USA*, 822 F.3d 1355, 1365 (Fed. Cir. 2016). The relevant inquiry is an objective test, which inquires "whether a competitor would reasonably believe that the applicant had surrendered the relevant subject matter." *PODS, Inc. v. Porta Stor, Inc.*, 484 F.3d 1359, 1368 (Fed. Cir. 2007). Arguments made by a patentee during prosecution cannot be analyzed in isolation and "must be viewed in context." *Read Corp. v. Portec, Inc.*, 970 F.2d 816, 824 (Fed. Cir. 1992); *see also Ecolab, Inc. v. FMC Corp.*, 569 F.3d 1335, 1342 (Fed. Cir.), *amended on reh'g on other grounds*, 366 F. App'x 154 (Fed. Cir. 2009).

IV. OBJECTIONS TO THE REPORT AND RECOMMENDATION

A. Amgen Did Not Clearly and Unmistakably Surrender Claim Scope

The Report errs by misinterpreting the arguments Amgen made to the Patent Office during the prosecution of the '707 Patent to overcome an obviousness rejection based on one prior art reference, Holtz. Amgen did not clearly and unmistakably surrender claim scope beyond the salt combinations listed in the claims of the '707 Patent—i.e., citrate and sulfate, citrate and acetate, and sulfate and acetate.

A review of the prosecution history is instructive. In an Office Action dated October 13, 2010, the examiner rejected the pending claims as being obvious over Holtz on the basis that a skilled artisan could have arrived at the claimed invention by "judicious selection and routine optimization" of the working conditions disclosed in Holtz. 10/13/2010 Office Action ("OA"), D.I. 10-2, at 4-5. In response, Amgen argued that: "Applicants point out that the pending claims recite a particular *combination* of salts. No combinations of salts is taught nor suggested in the Holtz et al. patent, nor is the *particular* combinations of salts recited in the pending claims taught nor suggested in this reference." 1/26/11 Response to OA, D.I. 10-3, at 5 (emphasis in original). Amgen further explained that a person of ordinary skill in the art could not merely take the various salts listed in Holtz (for use in a single-salt system, the state of the art at the time), optimize the conditions for running a HIC column in a routine way, and arrive at the dual-salt system claimed in the '707 Patent. *See id.* at 6. To this end, Amgen provided a declaration from an inventor of the '707 Patent that discussed experimental results that showed increased dynamic binding capacity using dual-salt systems. *Id.*; Declaration of Anna Senczuk ("Senczuk Decl."), D.I. 10-4. The salt combinations that the inventor used for those experiments were the combinations of salts listed in the claims—citrate and sulfate, citrate and acetate, and sulfate and acetate.

On April 7, 2011, the examiner issued a Final Rejection, maintaining the same rejection. Final OA, attached as Exh. 2, at 3-4. In its reply to the rejection, Amgen argued that Holtz lacks two elements of the claimed invention: (1) "the use of a *combination* of salts in a HIC operation," and (2) "the *enhancement of the dynamic binding capacity of a HIC column* imparted by applicants' method." Reply to 4/7/2011 OA, D.I. 10-1, at 5-6. Amgen used headers to demarcate the two elements that Holtz lacks: (1) a "Combination of Salts" and (2) "Enhancing the Dynamic Capacity of the HIC Column." *Id.* at 5-6. A Notice of Allowance then followed on July 16, 2012. Notice of Allowance, Exh. 1.

In concluding that Amgen disclaimed all salt combinations other than those listed in the claims of the '707 Patent (that is, citrate and sulfate, citrate and acetate, and sulfate and acetate), the Report focuses on Amgen's use of the phrase "*particular* combinations" in its 1/26/11 Response to Office Action and on Dr. Senczuk's use of the phrases "certain combinations," "specific dual salt combination," and "particular combination of salts" in her declaration. D.I. 50 at 10-12; 1/26/11 Response to OA, D.I. 10-3, at 5; Senczuk Decl., D.I. 10-6, at ¶¶ 2-4.

The Report, however, ignores context in finding that these statements "clearly and unmistakably" indicated to competitors that Amgen surrendered processes using combinations of salts different from the salts listed in the claims—the standard for argument-based estoppel. D.I. 50 at 12; *see Intendis GmbH*, 822 F.3d at 1365; *see also Phillips v. AWH Corp.*, 415 F.3d 1303, 1317 (Fed. Cir. 2005) (noting, in the context of claim construction, that "the prosecution history represents an ongoing negotiation between the PTO and the applicant, rather than the final product of that negotiation," and thus, stray statements plucked out of context from prosecution "often lack[] the clarity of the specification"). Amgen's use of the word "particular" in its (first) 1/26/11 Response to Office Action, in the context of the complete prosecution history, would be

understood to have been made in furtherance of its second argument: that Holtz did not teach or suggest the use of *particular combinations* of salts recited in the pending claims—that is, the use of dual salts *to increase dynamic capacity*. 1/26/11 Response to OA, D.I. 10-3, at 5. This was made clear in Amgen's (second) Reply to the 4/7/11 Office Action, where Amgen was explicit about what the claims require: (1) "the use of a *combination* of salts in a HIC operation," and (2) "the *enhancement of the dynamic binding capacity of a HIC column* imparted by applicants' method." Reply to 4/7/2011 OA, D.I. 10-1, at 5-6. Similarly, the use of the phrases "certain combinations of salts" and "this particular combination of salts" in the Senczuk Declaration would be understood, in context, to refer to any combination of salts that increases dynamic capacity, and not just those combinations of salts listed in the claims of the '707 Patent (i.e., citrate and sulfate, citrate and acetate, and sulfate and acetate). Senczuk Decl., D.I. 10-4, at ¶¶ 2, 4. This is a notable distinction from the prosecution history arguments at issue in *PODS, Inc.* where three separate estoppels were created when the patent applicant enumerated three distinct arguments, each providing an independent basis, to overcome a prior art rejection. *PODS, Inc.*, 484 F.3d at 1367-68.

Further, merely because Senczuk tested some salt combinations and performed "calculations illustrating the benefits for commercial manufacturing of using a specific dual salt combination" does not mean that Amgen disclaimed all other salt combinations within the scope of equivalents to which its claims are entitled. *See* Senczuk Decl., D.I. 10-4, at ¶ 3. Indeed, even if the inventor's experiments had been part of the specification, they would not be limiting because they merely illustrate specific embodiments of the invention. *See, e.g., Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1326-28 (Fed. Cir. 2002) (cautioning against limiting the claimed invention to preferred embodiments or specific examples in the specification).

In a footnote, the Report notes that Coherus pointed out a statement Amgen made during the prosecution of the parent of the '707 Patent, U.S. Patent No. 7,781,395 (the "'395 Patent"). D.I. 50 at 10-11 n.8. There, Amgen said that:

> . . . Holtz et al. column 26 and 27 does not teach or suggest combining the protein to be purified with the particular *combination of two salts, citrate and phosphate salts* at concentrations of between about *0.1 M and 1.0 M* before loading the protein on the HIC column. Instead, a protein solution containing lower concentrations of sodium acetate and sodium phosphate, together with NaCl and a high concentration of ammonium sulfate (four salts, not a combination of two salts as recited in the claimed method), is loaded onto the HIC column.

D.I. 10-7 at 6. The Report does not say that that statement clearly and unmistakably surrenders claim scope of the '395 Patent, and it does not. In any event, that statement, about the pending claims in the '395 Patent, certainly does not render Amgen's statements during the prosecution of the '707 Patent a clear and unmistakable surrender of claim scope under the doctrine of equivalents.

B. Dismissal Is Premature

The Report also errs in ignoring Amgen's concern that Coherus's Motion to Dismiss is an attempt to prematurely determine the scope of the asserted claims, and to terminate this litigation, before the Court has had the benefit of the resolution of factual disputes based on a developed record. *See* D.I. 50 at 15; *see also* D.I. 17 at 9-13.

Since the Magistrate Judge's Report issued, Judge Sleet has denied a motion for judgment on the pleadings in a similarly situated ANDA case that was "still in the early stages of litigation" where discovery had not begun as of the filing of the motion. *See Amgen Inc. v. Alkem Labs Ltd.*, C.A. 17-815-GMS, D.I. 23, at 4-5 (D. Del. Dec. 19, 2017). In that case, a generic manufacturer alleged that its accused products do not contain any of the excipients listed in the patent at issue and argued that prosecution history estoppel barred the patent owner from asserting infringement under the doctrine of equivalents as to the excipients contained in the

accused products. *Id.* at 2. The Court noted that "the underlying issue before the court is whether, at the pleadings stage in this ANDA case where the file history is highly technical and hotly disputed by the parties, the court should non-suit the plaintiff." *Id.* at 3. In light of the factual disputes as to the patent's file history and because discovery had not even begun when the motion was filed, the Court determined that the motion was premature. *Id.* at 3 n.2.

Here, as in *Amgen Inc. v. Alkem Labs Ltd.*, the '707 Patent's file history is "highly technical and hotly disputed," and there exist "material disputes of fact between the parties concerning the prosecution history" of the patent. *Id.* at 3-4. As discussed above, the parties dispute what was argued during the patent's prosecution with respect to the claims' scope. Discovery, including expert testimony, on how one of skill in the art would understand statements during prosecution is needed to resolve the dispute. *See, e.g.*, *Massachusetts Inst. of Tech. v. Shire Pharms., Inc.*, 839 F.3d 1111, 1119-22 (Fed. Cir. 2016) (looking to how a skilled artisan would read statements made during prosecution).

C. If the Court Finds Amgen's Complaint Insufficiently Pleaded, Amgen Should Have the Opportunity to Remedy the Insufficiency

The Report errs by concluding that Amgen's Complaint fails to allege any facts that would support the notion that there is equivalence between the dual salts recited in the claims of the '707 Patent and the [redacted] in its manufacturing process. D.I. 50 at 7-8. Amgen properly alleged equivalence as to the salt pairing limitation: "With respect to the use of dual salts in the Coherus process, a preparation containing protein is mixed with a combination of a first salt and a second salt, which combination is the equivalent of one or more of the recited salt pairs." D.I. 1 at ¶ 50. Amgen further notes that under the express terms of the BPCIA, it is prohibited from including in its Complaint any confidential information that Coherus provided to Amgen in the BPCIA information exchange: "No confidential information shall be included in

any publicly-available complaint or other pleading." 42 U.S.C. § 262(*l*)(1)(F). Accordingly, Amgen has been as specific as the BPCIA allows in pleading infringement with respect to the [redacted] in its confidential manufacturing process. The BPCIA does not allow Amgen to explain in its Complaint how the [redacted] is equivalent to the combinations of salts recited in the claims of the '707 Patent because, to do so, Amgen would necessarily have to identify, inter alia, the [redacted]. Amgen is also mindful that the Court disfavors filing pleadings under seal. *See, e.g.*, *Leucadia, Inc. v. Applied Extrusion Techs., Inc.*, 998 F.2d 157, 164 (3d Cir. 1993) (noting that pleadings are subject to the presumptive right of public access).

The Report finds that re-pleading would be futile. *See* D.I. 50 at 8, 18 n.12. As discussed above, however, the Report's conclusion regarding prosecution history estoppel is flawed. In light of this, if the Court finds Amgen's Complaint insufficiently pleaded, Amgen should have the opportunity to file an amended complaint under seal to address any insufficiency in the pleadings that the Court identifies.

V. CONCLUSION

For the foregoing reasons, Amgen respectfully requests that the Court reject the Report and Recommendation and deny Coherus's Motion to Dismiss. If the Court finds Amgen's complaint deficient, Amgen requests that the Court grant leave to Amgen to amend its complaint.

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Certification Pursuant to Standing Order For Objections Filed Under Fed. R. Civ. P 72

Pursuant to paragraph 5 of the Court's Standing Order for Objections Filed Under Fed. R. Civ. P. 72, Amgen certifies that these Objections do not raise new legal or factual arguments.

/s/ Jack B. Blumenfeld

Exhibit 1

Notice of Allowability	Application No. 12/822,072	Applicant(s) SENCZUK ET AL.	
	Examiner ROY TELLER	Art Unit 1654	

-- 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 *the communication filed 10/7/2011*.
2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.
3. ☒ The allowed claim(s) is/are *1-13*.
4. ☐ 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.

5. ☐ 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.
6. ☐ 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).
7. ☐ 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 _____.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/7/2011 has been entered.

Examiner's Comment

Claims 1-13 have been examined on the merits and found allowable - as amended within the Examiner's amendment below.

EXAMINER'S AMENDMENT

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 John Lamerdin on 7/11/2012.

IN THE CLAIMS:

In claim 1, at line 6, the term --respectively,-- has been added after the phrase "sulfate and acetate,".

In claim 10, at line 5, the term --respectively,-- has been added after the phrase "sulfate and acetate,".

In claim 12, at lines 1-2, the phrase "citrate and phosphate" has been omitted and replaced with the phrase --first and second--.

Conclusion

Claims 1-13 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROY TELLER whose telephone number is (571)272-0971. The examiner can normally be reached on Monday-Friday from 5:30am to 2:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cecilia Tsang, can be reached on 571-272-0562. 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://portal.uspto.gov/external/portal. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Roy Teller/
Examiner, Art Unit 1654

/Christopher R Tate/
Primary Examiner, Art Unit 1655

Exhibit 2

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/822,072	06/23/2010	Anna Senczuk	3470-US-DIV	5094

21069 7590 04/07/2011

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EXAMINER	
TELLER, ROY R	
ART UNIT	**PAPER NUMBER**
1654	

MAIL DATE	DELIVERY MODE
04/07/2011	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.

Office Action Summary	Application No.	Applicant(s)
	12/822,072	SENCZUK ET AL.
	Examiner	Art Unit
	ROY TELLER	1654

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

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 January 2011*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13* is/are rejected.

7)☒ Claim(s) *12 and 13* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ 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:

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)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This office action is in response to the action, filed 1/26/11.

Claims 1-13 are under examination.

Response to Amendments/Arguments

Applicant's arguments and amendments, filed 1/26/11, are acknowledged and have been fully considered. Any rejection and/or objection not specifically addressed is herein withdrawn.

Claim Objections

Claims 12 and 13 are objected to because of the following informalities: depending upon a non-existent claim. Appropriate correction is required.

Claim Rejections - 35 USC § 103

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 1-13 are/stand rejected under 35 U.S.C. 103(a) as being unpatentable over Holtz et al. (USPN 5,231,178) for the reasons of record which are restated below.

The instant invention is drawn to a process for purifying a protein on a hydrophobic interactive chromatography column comprising mixing a preparation containing the protein with a combination of a first salt and a second salt, loading the mixture onto a hydrophobic interaction column, and eluting the protein, wherein the first and second salt are citrate and phosphate salts, and wherein the concentration of each of the first salt and the second salt in the mixture is between about 0.1M and about 1.0M, wherein the column is eluted with a solution onto the column is between about pH 5 and 7. The instant specification reads on insulin-like growth factors as one of the proteins to be purified (see, e.g., instant specification, page 15, line 6).

Holtz et al. beneficially discloses a method of purification of insulin-like growth hormone, in which prior to contacting the eluate with the first hydrophobic interaction chromatography matrix, the initial eluate is buffered to a pH between 4.0- 7.0. Salts contemplated for such use are those salts which improve the hydrophobic interaction of IGF-1 and the hydrophobic interaction chromatography matrix, e.g., sodium sulfate, potassium sulfate, ammonium sulfate, potassium phosphate, sodium acetate, ammonium acetate, sodium chloride, sodium citrate and the like. The salt content will fall in the ranges of about 0.2 up to 2.0m; with salt content of about 0.4 up to 1M being preferred. See entire document including, for example, columns 11-13, 26-27 and 32.

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to purify a protein including an insulin-like growth hormone via the instantly claimed steps based upon the overall beneficial teachings provided by the cited reference. The adjustment of particular conventional working conditions (if not expressly

taught) is deemed merely a matter of judicious selection and routine optimization which is well within the purview of the skilled artisan.

Thus, the invention as a whole is prima facie obvious over the reference, especially in the absence of evidence to the contrary.

Applicant's arguments were fully considered but were not found persuasive. Applicant contends that the instant claims recite a particular combination of salts. However, the examiner contends that the cited reference does disclose salts used in a method of purification and that the adjustment of particular conventional working conditions (if not expressly taught) is deemed merely a matter of judicious selection and routine optimization which is well within the purview of the skilled artisan.

Conclusion

All claims are rejected.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROY TELLER whose telephone number is (571)272-0971. The examiner can normally be reached on Monday-Friday from 5:30 am to 2:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cecilia Tsang, can be reached on 571-272-0562. 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).

/Roy Teller/

Examiner-1654

4/6/11