Doc. 501 Att. 20

EXHIBIT H-6

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RECEIVED IN DIRECTION'S OFFICE

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APR 2 4 1986.

IN THE UNITED STATES PATENT GROUP 120 AND TRADEMARK OFFICE

"PRODUCTION OF Application of ERYTHROPOIETIN" FU-KUEN LIN Group Art Unit 127 Serial No. 675,298 Examiner: J. Martinell Filed November 30, 1984

PRELIMINARY AMENDMENT ACCOMPANYING PETITION TO MAKE SPECIAL BECAUSE OF ACTUAL INFRINGEMENT (37 C.F.R. \$1.102 & M.P.E.P. \$708.02)

Hon. Commissioner of Patents and Trademarks Washington, D.C. 20231

Sir:

Consistent with the requisites of M.P.E.P. \$708.02 VIII, this Preliminary Amendment is submitted with Applicant's Petition to Make Special under 37 C.F.R. \$1.102. Please enter the following amendments.

IN THE SPECIFICATION

Page 30, line 21, please delete "Asn" and insert --Asn-- in place thereof.

> Page 31, line 5, please delete "and RIA Analysis". Page 41, line 20, please delete "18, pp. 533-543

(1979)" and insert --supra--.

Page 41, line 29, please delete "NEF-976" and

insert --NEF-972--. /

Page 53, line 13, after "orientation" please

insert -- (vectors F, X and G) -- .

Page 74, line 9, after "1984", insert -- (Published

EPO Application No. 136,490)---

Page 86, line 2, please delete "33932, 33934 and 33933" and insert --39932, 39934 and 39933-- in place thereof.

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Page 89, line 21 please delete "118" and insert --128-- in place thereof.

IN THE CLAIMS

Please cancel claims 37, 38 and 50 without prejudice. Please enter new claims 61 through 72.

- --61. A biologically functional circular plasmid or viral DNA vector including a DNA sequence according to claim 14.
- 62. A procaryotic or eucaryotic host cell stably transformed or transfected with a DNA vector according to claim 61.
- 63. A biologically/functional circular plasmid or viral DNA vector including a DNA sequence according to claim 17.
- 64. A procaryotic or eucaryotic host cell stably transformed or transfected with a DNA vector according to claim 63.
- 65. A biologically functional circular plasmid or viral DNA vector including a DNA sequence according to claim 34.
- 66. A procaryotic or eucaryotic host cell stably transformed or transfected with a DNA vector according to claim 65.

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67. A biologically functional circular plasmid or viral DNA vector including a DNA sequence according to claim 35.

68. A procaryotic or eucaryotic host cell stably transformed or transfected with a DNA vector according to claim 67.

69. A process for the production of a polypeptide having part or all of the primary structural conformation and one or more of the biological properties of naturallyoccurring erythropoietin, said process comprising:

growing, under suitable nutrient conditions, procaryotic or eucaryotic host/dells transformed or transfected with a DNA vector according to claim, and isolating desired polypeptide products of the expression of DNA sequences in said vector.

70. A process for the production of a polypeptide having part or all of/the primary structural conformation and one or more of the biological, properties of naturallyoccurring erythropoletin, said process comprising:

growing, under suitable nutrient conditions, pro--- caryotic or eucaryotic host cells transformed or transfected with a DNA vector according to claim 63, and isolating desired polypeptide products of the expression of DNA sequences in said vector.

71/ A process for the production of a polypeptide having part/or all of the primary structural conformation and one or more of the biological properties of naturallyoccurring/erythropoietin, said process comprising:

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growing, under suitable nutrient conditions, procaryotic or eucaryotic host cells transformed or transfected with a DNA vector according to claim 65, and isolating desired polypeptide products of the expression of DNA sequences in said vector.

having part or all of the primary structural conformation and one or more of the biological properties of naturally-occurring erythropoistin, said process comprising:

growing under suitable nutrient conditions, procaryotic or encaryotic host cells transformed or transfected with a DNA vector according to claim 67, and isolating desired polypeptide products of the expression of DNA sequences in said vector.--

REMARKS

Claims 1 through 36, 39 through 49, 51 through 60, and new claims 61 through 72 are in the application. New claims 61 through 72 comprehend precisely the same subject matter previously claimed in original application claims 37, 38 and 50 whose cancellation is sought hereby. New claims 61 though 72 are believed to be in proper form and free of any objection with respect to multiple dependency such as was asserted by Examiner Martinell in the "International Search Report" dated March 7, 1985 with respect to corresponding Patent Cooperation Treaty Application US84/02021, a copy of which is attached hereto as Exhibit No. 1.

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Preliminary Election Of Claims 14, 15, 17-36, 58 and 61-72

Consistent with the suggestion set forth in M.P.E.P. \$708.02 VIII concerning the presentation of claims "directed to a single invention", and based on "Observations Where Unity Of Invention Is Lacking" set in the International Search Report (Exhibit No. 1) referred to above, Applicant herewith provisionally elects prosecution of claims 14, 15, 17-36, 58, and 61 through 72, all of which are directed to DNA sequences, vectors including such DNA sequences, host cells transformed or transfected with the claimed vectors, and processes for the production of polypeptides through use of claimed transformed or transfected hosts.

While applicant has made the above preliminary election "without traverse", it will be understood that the same is being made without prejudice to applicant's right to pursue claims to all patantable subject matter disclosed in his application and specifically to pursue the patenting of all presently non-elected claims.

Statement With Respect To "Pre-Examination Search"

Commencing prior to the filing of the first parent patent application leading up to the present application, and on an essentially continuous basis thereafter through to the present, Applicant, Applicant's assignee and Applicant's counsel have essentially continuously reviewed scientific publications, U.S. and foreign patents and foreign published patent applications in an attempt to identify prior art which may be deemed to be pertinent to the patentability of claims now pending in the present application. Also the subject of review by Applicant, his assignee and counsel

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have been those references which were cited, for example, in the International Search Report attached as Exhibit No. 1 hereto and in the examination of parent U.S. Application Serial No. 561,024. See, e.g., the copy of PTO-892 attached hereto as Exhibit 2. To the extent that any known references were determined to be potentially relevant to patentability of any in claims in the present application or any parent application at the time of filing, they were directly referred to in the text of the application.

In an attempt to respond to the suggestions contained in M.P.E.P. §708.02 IV(c)(d)(e), Applicant is concurrently submitting herewith an Information Disclosure Statement Under 37 C.F.R. §1.97 including Form PTO-1449. This Statement includes copies of all references cited in the present specification together with copies of all references which have come to the attention of Applicant's counsel since the filing date of the application.

"sub-set" of the set of references supplied by the Information Disclosure Statement. This sub-set of references comprises those references which are presently believed by counsel to be "closely related to the subject matter encompassed by the claims" preliminarily elected herein (i.e., claims 14, 15, 17-36, 58, and 61-72 relating to DNA sequences, vectors, hosts and recombinant erythropoietin production processes). Comments concerning pertinence to patentability of these references are provided in a separate section (pages 2 to 5) within the Information Disclosure Statement.

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Statement With Respect To Deposited Microorganisms

Applicant notes that microorganisms referred to by A.T.C.C. Deposit Number are either permanent A.T.C.C. stocks (e.g., COS-1 cells, CRL-1650) or were deposited on behalf of applicant under the provisions of the Budapest Treaty. Attached hereto as composite Exhibit No. 4 are copies of A.T.C.C. acknowledgements of Budapest Treaty status of the deposits made in connection with this application.

CONCLUSION

Applicant respectfully submits that claims 14, 15, 17-36, 58 and 61-72 are in condition for allowance and an early notice thereof is solicited.

Respectfully submitted,

MARSHALL, O'TOOLE, GERSTEIN, MURRAY & BICKNELL

Michael F. Borun (Reg. No. 25,447)

A Member of the Firm Attorneys for Applicants Two First National Plaza Chicago, Illinois 60603

(312) 346-5750

Chicago, Illinois

April 23 , 1986

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Exhibit No. 1

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INTERNATIONAL SEARCH REPORT

I. CLA	SSISICATION OF SHE HELT MATTER III	International Application No PCT	/US84/02021
₩ ccara	SSIFICATION OF SUBJECT MATTER (if several class	Ification tympole sonic codess 45.1	
GO	33/50, A61K 37/00, C12N 1	C07G 7/00, C12P 21 /00, C12N 5/00, C1	/02, C12Q 1/58 2N 5/02
II. FIEL	DS SEARCHED		
	Minimum Documen	ntation Searched +	
lassifici	Ition System	Classification Symbols	
	424/1.1, 1.5, 85,177;	; 436/63,94,504; 26	0/112R, 112.5
	U.S. 435/6,7,68,70,71,91,1	172.3,240,241,243,2	255,256,317,253
	Documentation Searched other to the Extent that such Documents	han Minimum Documentation are included in the Fields Searched #	
(CA Search Data Base 1972-1	985	
III. DOC	UMENTS CONSIDERED TO BE RELEVANT :-		
tegary '	Citation of Document, 16 with indication, where appl	ropnate, of the relevant passages LT	Relevant to Claim No. 15
Y	N Waiss as at B		
•	N, Weiss et al, Proc. Natl Volume 79, 1982, pages 546	5-5469	1-13,16,39- 41, 47-49, 51-55,59
X	N, Weiss et al, Proc. Natl Volume 79, 1982, pages 546	. Acad. Sci. USA 5-5469	51-54
Y,P	N, Lee-Huang, Proc. Natl. Volume 81, May 1984, pages	Acad. Sci USA 2708-2712.	1-36,39-49,
X,P	N, Lee-Huang, Proc. Natl. A Volume 81, May 1984, pages	Acad. Sci USA, 2708-2712	14,15,24,34,
Y	N, Broome et al, Proc. Nati Volume 75, 1978, pages 2746	l. Acad. Sci. USA, 5-2749.	1-36, 39-49, 55,59
Y	US,A, 4,397,840, Published Takezawa et al	09 August 1983,	1-13,16,39- 41, 47-49,55,
	If categories of cited documents; 13 ument defining the general state of the art which is not	"T" later document published after the or priority date and not in conflict.	
con	sidered to be of particular relevance ier document but published on or after the international	cited to understand the principle invention	
Alla	g date	"X" document of particular relevant cannot be considered novel or	e; the claimed invention cannot be considered to
A (1)	ument which may throw doubts on priority claim(s) or ch is cited to establish the publication date of another	"Y" document of particular relevance	ļ
	tion or other special reason (as specified) ument referring to an oral disclosure, use, exhibition or	cannot be considered to involve a document is combined with one i	n inventive step when the
•	n nimetra	ments, such combination being o	parions to a belsou skilled
late	ument published prior to the international filing date but r than the priority date claimed	"A" document member of the same p	atent family
CERT	FICATION		
te of the	Actual Completion of the International Search 9	Date of Mailing of this International Sec	arch Report 1
5 Fe	bruary 1985	07 MAR 191	85 /
		Signature of Authorized Officer 10	15/1
1	s	70.10	hintel
-	A/200 (second speet) (Detabas 1981)	James Martinell	

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International Application No. PCT/US84/02021

HER INFORMATION CONTINUED FROM THE SECOND SHEET US,A, 4,397,840, Published 09 August 1983, 40,41,47-49, χ 55-57 Takezawa et al N, Dunn et al, Chemical Abstracts, Volume 91, 1-13,15,39-Y 41,47-49, 1979, Abstract No. 190417r. 55,59 N, Molecular Cloning A Laboratory Manual, Maniatis et al (ed), Cold Spring Harbor 31,32 Y Laboratory, 1982, pages 108-112. V. OBSERVATIONS WHERE CERTAIN CLAIMS WERE FOUND UNSEARCHABLE 10

This international search (eport has not been established in respect of certain claims under Article 17(2) (a) for the following residues:

1. It claim numbers because they relate to subject matter 12 not required to be searched by this Authority, namely:

1. It claims 37, 38 and 50 are unsearchable because claim 37 recites

1. It claims 37, 38 and 50 are unsearchable because claim 37 recites

1. It claims 37, 38 and 50 are unsearchable because claim 37 recites

1. It claims 37, 38 and 50 are unsearchable because claim 37 recites

1. It claims 37, 38 and 50 are unsearchable because claim 37 recites claim 37 may depend on all of claims 14,17 and 34 making claim 37 an improper multiple dependent claim. Claims 38 and 50 depend from claim 37 and are hence also improper multiple dependent claims.

2. Claim numbers because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out $oldsymbol{u}_i$, specifically:

$\overline{\mathrm{VL}[X]}$ OBSERVATIONS WHERE UNITY OF INVENTION IS LACKING $\overline{\mathrm{U}}$

This International Searching Authority found multiple inventions in this international application as follows:

- I. Claims 1-13, 16, 39-41, 47-49, 55-57 and 59. II. Claims 14, 15, 17-36 and 58.
- III. Claims 42-46
- IV. Claims 51-54.
- 1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims
- 2. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims of the international application for which fees were paid, specifically claims:
- Li No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claim numbers:
- 4. As all searchable claims could be searched without effort justifying an additional fee, the International Searching Authority did not invite payment of any additional fee.

- The additional search fees were accompanied by applicant's protest.
- inc protest accompanied the payment of additional search fees.

Seem 97 'II 2 & 1'40 (v-innlemental sheet (2)) (October 1981)

	UMENTS CONSIDERED TO BE RELEVANT (CONTINUED FROM THE SECOND SHE	£17)
Category	The second desired and	Relevant to Claim f
	N, Grantham et al, Nucleic Acids Research, Volume 9, 1981, pages r43-r74.	1-36,39-49 55,59,60
Y	N, Bennetzen et al, J. Biol. Chem., Volume 257, 1982, pages 3026-3031.	1-36,39-49 55,59,60
Y	N, Sue et al, Proc. Natl. Acad. Sci. USA, Volume 80, 1983, pages 3651-3655.	1-36,39-49 51-60
Х	N, Sue et al, Proc. Natl. Acad Sci. USA Volume 80, 1983, pages 3651-3655	14,15,24,3
Y	N, Wallace et al, Nucleic Acids Research, Volume 9, 1981, pages 879-894	1-36,39-49
Y	N, Hamer et al, Nature, Volume 281, 1979, pages 35-40.	42-46
Y,P	US,A, 4,442,205, Published 10 April 1984, Hamer et al.	42-46
Y	US,A, 4,399,216, Published 16 August 1983, Axel et al.	14,15,17-3 42-46
Υ .	US,A, 4,411,994, Published 25 October 1983, Gilbert et al.	42-46
Y	US,A, 4,338,397, Published 06 July 1982 Gilbert et al	42-46
X		14,15,24, 34,36,58
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Exhibit No. 3

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

"PRODUCTION OF Application of ERYTHROPOIETIN" FU-KUEN LIN Group Art Unit 127 Serial No. 675,298 Examiner: J. Martinell Filed November 30, 1984 ١

> DECLARATION ACCOMPANYING PETITION TO MAKE SPECIAL BECAUSE OF ACTUAL INFRINGEMENT (37 C.F.R. \$1.102 & M.P.E.P. \$708.02)

The undersigned, MICHAEL F. BORUN, herewith declares as follows:

I am an Attorney at Law, licensed to practice before the Bar of the State of Illinois and the United States Patent and Trademark Office (Registration No. 25,447). I am an attorney of record for Fu-Kuen Lin, inventor of the subject matter disclosed and claimed in the above-identified application Serial No. 675,298, and have been engaged as a legal counsel of the assignee of record (Reel 4352, Frame 075), Kirin-Amgen, Inc., a California corporation, 1900 Oak Terrace Lane, Thousand Oaks, California 91320.

I prepared and filed the above-identified application and all parent U.S. Patent applications identified therein (i.e., Serial No. 561,024, filed December 13, 1983; Serial No. 582,185, filed February 21, 1984; and Serial No. 655,841, filed September 28, 1984). I am familiar with the subject matter claimed in Serial No. 675,298.

I make this Declaration for the purpose of relating certain facts known by me to be true and certain information believed by me to be true, which facts and information are pertinent to a concurrently filed Petition to Make

Special. Specifically, the facts and information related herein are of the type described in M.P.E.P. \$708.02 II concerning showings necessary to support a Petition to Make Special because of actual infringement.

General Statement Concerning The Subject Matter Disclosed And Claimed

The focus of the discoveries described in the present patent application is erythropoietin ("EPO"), a protein hormone critically involved in regulation of the body's production of red blood cells. Prior to the invention, EPO was only available in minute quantities (principally by means of isolation from extremely low concentration natural sources such as the urine of aplastic anemia patients) and only a small part of the chemical structure of EPO was known, . Employing unique detection methods, the inventor isolated the genetic material (DNA) which codes for cellular production of EPO. This DNA was characterized (sequenced), allowing for the revelation in this application of the protein's primary chemical structure (amino acid sequence) which had eluded scientific determination over decades of intense research. Recombinant methods were carried out by the inventor which allowed for large scale production of pure erythropoietin by cells in culture and which assured that enough EPO could be made available for human clinical trials now in progress, in the treatment of chronically anemic kidney dialysis patients.

The claims of the present application are principally directed to contributions of the inventor in the form of DNA sequences which "encode" EPO and to uses of these sequences in recombinant procedures for large scale production of pure, biologically active EPO along with a

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whole family of other new products (such as EPO analogs and fragments) which are "related" to EPO in terms of correlation based on chemical structures first revealed in this application.

Showing With Respect To Evidence Of Actual Infringement

I have attached hereto printed materials which I believe are pertinent to the showing required under M.P.E.P. \$708.02 II(1) to the effect that "there is an infringing device or product actually on the market or method in use".

(a) Elanex Corporation.

Attached hereto as Exhibit "A" is a copy of correspondence dated January 2, 1986 from Mr. Lawrence H. Thompson of Elanex Corporation, Bellevue, Washington, to Mr. R. A. Schoellhorn of Abbott Laboratories. This document states: (1) that Elanex Corporation has "cloned, expressed and produced EPO at commercial levels" (emphasis supplied); (2) that the EPO product produced by Elanex has "in vitro activity and invivo (sic) activity"; (3) that Elanex "cell lines have reached levels of production satisfactory for commercial production" (emphasis supplied); (4) that Elanex is "currently taking proposals from nationally known producers of product (sic) in cell line technology"; (5) that Elanex Corporation has "isolated the technology with respect to use for commercial production" (emphasis supplied); and (6) that Elanex is in a position to "send a sample of our product" for testing in the context of making arrangements for "Exclusive U.S. Distribution rights to our EPO".

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(b) Genetics Institute, Inc.

Attached hereto as Exhibit "B" are copies of a cover page and pages 2, 3 and 4 of a document entitled "Annual Report 1985" by Genetics Institute, Inc., Cambridge, Massachusetts. In this document, it is stated with respect to erythropoietin that Genetics Institute has: "...produced recombinant EPO which is fully functional in animal model systems. We have supplied bulk protein to Boehringer Mannheim GmbH and Chugai Pharmaceutical Co Ltd., our collaborative partners on EPO, and expect to see EPO enter human clinical trials for treatment of the anemia due to chronic renal failure in 1986" (emphasis supplied). The document also states that:

> "Genetics Institute will be responsible for developing a commercial process for EPO and also has the right to manufacture a substantial portion of Boehringer Mannheim's clinical trial and eventual commercial product requirements. Boehringer Mannheim will be responsible for the conduct of human clinical trials and eventual product marketing and distribution. Licensing fees for product development and contractual fees for the supply of bulk material to EPO clinical trials are substantial and are being realized over the period 1985 to 1987" (emphasis supplied).

Attached hereto as Exhibit "C" is a copy of the cover and pages 3, 5-7, 14-15, and 19-21 of an April 11, 1986, Preliminary Prospectus of Genetics Institute, Inc. This document also refers to use by Genetics Institute of DNA sequences encoding EPO (page 15) for large scale production of the protein for projected clinical application by corporate partners of Genetics Institute. Statements in the Prospectus are believed to acknowledge the early filing of the present application (page 19) and the use of recombinant produced EPO in existing clinical trials by Applicant's assignee (page 21).

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Showing With Respect To Tim of Actual Knowledge of Infringement

The document originating with Elanex Corporation which is attached hereto as Exhibit "A" is believed to have been received by officers of Applicant's assignee, Kirin-Amgen, Inc., on or about January 13, 1986. The Genetics Institute Annual Report document whose pages are attached hereto as Exhibit "B" is believed to have been received by officers of applicant's assignee, Kirin-Amgen, Inc., on March 3, 1986. The Genetics Institute Preliminary Prospectus, whose pages are attached as Exhibit "C", was received shortly after its issue date of April 11, 1986. Exhibit "D" (discussed infra) was received shortly after its publication in 1985.

Showing With Respect To Comparison With Claims of Application S.N. 675,298

In the course of my review of the Elanex Corporation document attached hereto as Exhibit "A", I have noted reference to cloning and expression and production of in vitro and in vivo-active erythropoietin at commercial levels. The use of the term "cloning" with respect to erythropoietin, in my understanding and experience, constitutes an admission that Elanex Corporation is presently in possession of a "purified and isolated DNA sequence coding for procaryotic or eucaryotic host expression of a polypeptide having part or all of the primary structural conformation and one or more of the biological properties of erythropoietin" as claimed in claim 17 of application Serial No. 675,298. It is my further understanding that "expression" and "production" as referred to in the Elanex Corporation

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document could only refer to recombinant expression of erythropoietin accomplished through use of vectors as claimed in claim 63 of the present application, transformed or transfected host cells as claimed in claim 64, and production processes as claimed in claim 70.

Similarly, upon review of the Genetics Institute documents attached hereto as Exhibits "B" and "C", it is my understanding and belief that the development of commercial "recombinant" production processes resulting in the supply and sale for profit of "bulk" quantities of erythropoietin protein to collaborative partners admittedly has been accomplished by Genetics Institute through use of DNA sequences, expression vectors, transformed or transfected hosts, and production processes as claimed respectively in claims 17, 63, 64 and 70 of application Serial No. 675,298. My belief is reinforced in part by the descriptions set out in a publication (attached as Exhibit "D" hereto) in Nature, 313, 806-810 (1985) wherein authors of the publication, characterized as employees of Genetics Institute, describe their uses of DNA sequences, vectors, host cells, and production processes as are claimed in the present application to produce polypeptide products as claimed in the present application.

5. Opinion On Infringement

Based upon my review of the documents attached hereto as Exhibits "A", "B", "C" and "D", it is my opinion that at least some of the claims (including, but not limited to, claims 17, 61, 62 and 69) of the present application are unquestionably being infringed in the United States at the present time by Elanex Corporation and by Genetics Institute, Inc.

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6. Statement With Respect To Prior Art

Commencing prior to the filing of parent U.S. application Serial No. 561,024 on December 13, 1983, on an essentially continuous basis thereafter, and through to the present, I have taken what I believe to be substantial steps to acquire knowledge of the prior art pertinent to the claims pending in the present application Serial No. 675,298. These steps have included the authorization of the performance of computer assisted searches through data bases reasonably assumed by me to provide information concerning pertinent prior art in the form of literature references, published U.S. and foreign patents, and foreign patent applications. I have also taken steps to familiarize myself with items of prior art which were cited in the course of preliminary examination of foreign patent applications corresponding to application Serial No. 675,298 and in the course of PTO examination on the merits of claims in parent U.S. Patent Application Serial No. 561,024. Based on the above-described searching for and review of items of prior art, I believe myself to possess a "good knowledge of the pertinent prior art" with respect to the claimed subject matter and specifically those provisionally elected claims of application Serial No. 675,298 which relate to DNA sequences, vectors, host cells and recombinant methods for production of erythropoietin.

7. Statement With Respect To Allowability Of The Claims

It is my belief that all of the claims presently pending in U.S. application Serial No. 675,298 are directed to allowable subject matter under the Patent Laws of the United States.

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I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that willful, false statements and the like so made are punishable by fine or imprisonment or both, under Section 1001 of Title 18 of the United States Code and that such willful, false statements may jeopardize the validity of the application or document or any patent resulting therefrom.

Michael F. Borun

Date: Aprel 23,1986.



12301 Parklawn Drive • Rockville, MD 20252 USA • Telephone: (301)281-2600 Telex: 902-762

BUDAPEST TREATY ON THE INTERNATIONAL RECOGNITION OF THE DEPOSIT OF MICROORGANISMS FOR THE PURPOSES OF PATENT PROCEDURE

INTERNATIONAL FORM

RECEIPT IN THE CASE OF AN ORIGINAL DEPOSIT ISSUED PURSUANT TO RULE 7.3 AND VIABILITY STATEMENT ISSUED PURSUANT TO RULE 10.2

Michael F. Borun, Esq. Marshall, O'Toole et al	
Marshall O'Tools at al	•
Two First National Plaza	
Chicago, Illinois 60603	
ON BEHALF OF: Amgen	
1900 Oak Terrace	Lane
Deposited on behalf of Thousand Oaks Co	lifami- orga
	Cuen Lin)
The DEPOSITOR	Accession number given by the ATCC
Saccharomyces cerevisiae with RK81	
Saccharomyces cerevisiae with YSDP4	20734
	20 734
he deposit(s) identified above was(were) accompanied by:	
a scientific description	•
XX	•
XX a proposed taxonomic designation:	Saccharomyces cerevisiae
We will inform you of all requests for the strain	
XX The strain(s) will be made available if a patent of or if a U.S. Patent is issued citing the strain(s). The strain(s) are available to the scientific publications will be maintained for a world for a partial of the strain(s).	fice signatory to the Budapest Treaty certifies one's right to receive c upon request.
XX The strain(s) will be made available if a patent of or if z U.S. Patent is issued citing the strain(s). The strain(s) are available to the scientific publithe strain(s) will be maintained for a period of at least 30 yer the most recent request for a sample. The United States, as	fice signatory to the Budapest Treaty certifies one's right to receive c upon request. The state of deposit, and for a period of at least five year swell as many other countries.
XX The strain(s) will be made available if a patent of or if a U.S. Patent is issued citing the strain(s). The strain(s) are available to the scientific publi. The strain(s) will be maintained for a period of at least 30 years the most recent request for a sample. The United States, as a viability of the culture(s) identified the price of the most recent request for a sample.	fice signatory to the Budapest Treaty certifies one's right to receive cupon request. The state of deposit, and for a period of at least five year swell as many other countries.
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