



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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JUN 11 1988

S/Re
14/3/88

Application of:) "Production of
FU-KUEN LIN) Erythropoietin"
Serial No: 113,179) Group Art Unit 127
Filed: October 23, 1987) Examiner (Expected):
) A. Tanenholtz
(Based on S.N. 675,298,)
filed November 30, 1984,)
issued as U.S. 4,703,008)
on October 27, 1987))

APPLICANT'S SECOND PRELIMINARY AMENDMENT

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

Sir:

Consistent with the February 18, 1988 favorable Decision On Petition To Make Special and the provisions of M.P.E.P. §708.02, please amend the above-identified application as follows:

IN THE SPECIFICATION

Please delete the entire text of page 1, lines 3-6 as amended October 23, 1987 and insert the following text in place thereof:

--This is a continuation of my co-pending U.S. Patent Application Serial No. 675,298, filed November 30, 1984 and issued as U.S. Letters Patent No. 4,703,008 on October 27, 1987, which was a continuation-in-part of my co-pending U.S. Patent Application Serial No. 561,024, filed December 13, 1983, now abandoned, and a continuation-in-part of Serial No. 582,185, filed February 21, 1984, now aban-

Page 61, line 25, "hemogeneous" should be
--homogeneous--.

Page 88, line 36, "lablled" should be
--labelled--.

Page 91, line 29, please delete "a".

Page 92, line 10, "Table VI" should be
--Figure 6--.

Page 95, line 10, "membrances" should be
--membranes--.

IN THE CLAIMS

Please cancel claims 61-64 without prejudice to Applicant to pursue claims of the same or similar scope in a duly-filed continuing application.

Please enter new claims 65-69.

--65. A process for the preparation of an in vivo biologically active glycosylated polypeptide comprising the steps of:

(a) growing a mammalian host cell which is capable of effecting post-translational glycosylation of polypeptides expressed therein and which is transformed or transfected with an isolated DNA sequence encoding a polypeptide having a primary structural conformation sufficiently duplicative of that of naturally occurring human erythropoietin to allow possession of the in vivo biological property of causing bone-marrow cells to increase production of reticulocytes and red-blood-cells, or the progeny thereof, under nutrient conditions suitable to allow, in sequence,

- (i) transcription within said host cell of said DNA to mRNA in the sequence of transcription reactions directed by the nucleotide sequence of said DNA;
 - (ii) translation within said host cell of said mRNA to a polypeptide in the sequence of translation reactions directed by the nucleotide sequence of said transcribed mRNA;
 - (iii) glycosylation within said host cell of said polypeptide in a pattern directed by the amino acid sequence of said translated polypeptide and sufficiently duplicative of the pattern of glycosylation of naturally occurring human erythropoietin to allow possession by the translated glycosylated polypeptide product of the in vivo biological property of causing bone marrow cells to increase production of reticulocytes and red blood cells; and
- (b) isolating the glycosylated polypeptide so produced.

66. The process according to claim 65 wherein said host cell is a CHO cell.

67. The process according to claim 65 wherein said host cell is a COS cell.

68. The process according to claim 65 wherein said DNA is cDNA.

with the ruling of the C.A.F.C. in In re Durden because the process herein claimed could not have been expected to provide the valuable product attained.

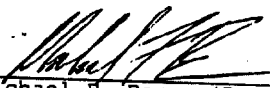
CONCLUSION

The foregoing amendments and remarks are believed to establish that claims 65-69 are in condition for allowance and an early notice thereof is solicited.

Respectfully submitted,

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By


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