

# EXHIBIT 19

All communications respecting this case should identify it by number and name of parties.



**U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office**

Address: BOX INTERFERENCE  
Commissioner of Patents and Trademarks  
Washington, D.C. 20231

MAILED  
MAY 09 1989  
CARD OF PATENT APPEALS  
& INTERFERENCES

Patentee: Lin  
Serial No.: 113,179  
Filed: October 23, 1987  
For: PRODUCTION OF  
ERYTHROPOIETIN

Accorded Benefit of:  
US SN 561,024, filed 12/13/83;  
US SN 582,185, filed 02/21/84;  
US SN 655,841, filed 09/28/84;  
US SN 675,298, filed 11/30/84

The case referred to above has been forwarded to the Board of Patent Appeals and Interferences because it is adjudged to interfere with other cases hereafter specified. Attention is directed to the fact that this interference is declared pursuant to 37 CFR 1.601 et seq., effective February 11, 1985 (49 F.R. 48416, 1050 O.G. 385). The interference is designated as No. 102,097.

By direction of the Commissioner of Patents and Trademarks and as required by 35 USC 135(c), notice is hereby given the parties of the requirement of the law for filing in the Patent and Trademark Office a copy of any agreement "in connection with or in contemplation of the termination of the interference."

FORM PTOL 788 (REV. 1-88)

AM 17 005483  
CONFIDENTIAL  
SUBJECT TO PROTECTIVE ORDER

AM-ITC 00332531

JUN 22 1987 11:15AM MARSHALL, O'TOOLE, GERSTEIN, MURRAY

P. 3/4

Serial No. 113,179

- 2 -

The cases involved in this interference are:

Junior Party

Applicants: Edward Fritsch, Rodney M. Hewick and Kenneth Jacobs

Addresses: 115 North Brand Road  
Concord, Massachusetts 01742;  
16 Woodcliffe Road  
Lexington, Massachusetts 02173;  
151 Beaumont Avenue  
Newton, Massachusetts 02160

Serial No.: 693,258, filed January 22, 1985

For: PRODUCTION OF HUMAN ERYTHROPOIETIN

Assignee: Genetics Institute, Inc., Boston, Massachusetts,  
a corporation of Delaware

Accorded Benefit of: U.S. SN 688,622 filed January 3, 1985

Attorney of Record: Bruce M. Eisen, David L. Bernstein  
and Ellen J. Kapinos

Associate Attorney: Eugene Moroz and William S. Feiler  
and George A. Skoler

Address: Ellen J. Kapinos, Esq.  
Genetics Institute, Inc.  
87 Cambridge Park Drive  
Cambridge, Massachusetts 02140-2387

Senior Party

Patentee: Fu-Kuen Lin

Address: 438 Thunderhead Street  
Thousand Oaks, California 91360

Serial No.: 113,179, filed October 23, 1987

For: DNA SEQUENCES ENCODING ERYTHROPOIETIN

Assignee: Amgen, Inc, Thousand Oaks, California,  
a corporation of Delaware

Attorney of Record: William E. Dominick, Albert W. Bicknell,  
William A. Marshall, Jerome B. Klose,  
Basil P. Mann, Alvin D. Shulman, Donald J.  
Brott, Owen J. Murray, Allen H. Gerstein,  
Nate F. Scarpelli, Edward M. O'Toole,  
Michael F. Borun, Carl E. Moore, Jr.

Associate Attorney: None

Accorded benefit of: US SN 675,298, filed Nov. 30, 1984, Patent  
No. 4,703,008, issued October 27, 1987  
US SN 561,024, filed Dec. 13, 1983;  
US SN 582,185, filed Feb. 21, 1984;  
US SN 655,841, filed Sep. 28, 1984

Address: Merriam, Marshall and Bicknell  
Two First National Plaza, Suite 2100  
20 South Clark Street  
Chicago, Illinois 60603

AM 17 005484  
CONFIDENTIAL  
SUBJECT TO PROTECTIVE ORDER

JUL 27 1992 01:15PM MARSHALL, UTOWLE, GURSTEIN, HUPP

P. 4/4

Serial No. 113,179

- 3 -

Count 1

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.

The claims of the parties which correspond to the ~~parties~~ <sup>COUNT</sup> are:

Fritsch et al: Claims 72 and 73  
Lin: Claims 65-69

*Marc L. Caroff*  
Marc L. Caroff  
Examiner-in-Chief  
(703) 557-4009

MLC/mjg

AM 17 005485  
CONFIDENTIAL  
SUBJECT TO PROTECTIVE ORDER