

**In the Matter of:**

*Amgen, Inc. v.  
Hoechst Marion Roussel, Inc., et al.*

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*Trial Volume 21  
September 6, 2000*

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[1] MR. DAY: His mike was off.  
 [2] THE WITNESS: Would you like me to repeat the last  
 [3] answer, your Honor?  
 [4] MR. SCHWARTZ: I think he would, Mr. Borun.  
 [5] THE COURT: Mr. Knox, wait a minute. We're not  
 [6] doing too well here.  
 [7] Mr. Knox, is the systems person or the top person  
 [8] out there in Chicago, can you do something for Mr. Borun's  
 [9] microphone? I can't hear him.  
 [10] MR. KNOX: All right, your Honor.  
 [11] THE WITNESS: Your Honor, the technical person has  
 [12] placed another microphone in front of me. Is that better?  
 [13] THE COURT: It is much better, sir. Thank you,  
 [14] Mr. Knox.  
 [15] Go ahead, Mr. Schwartz.  
 [16] Q: You also represented Amgen in a number of foreign  
 [17] patent applications; correct?  
 [18] A: I represented them in dealing with foreign agents and  
 [19] attorneys. I am not licensed to practice in any foreign  
 [20] country.  
 [21] Q: And but Paragraph 6 —  
 [22] THE COURT: Wait a minute.  
 [23] Mr. Knox, now we can't hear Mr. Schwartz.  
 [24] MR. KNOX: We're working on that right now.  
 [25] THE COURT: Thank you. I heard him well before,

[1] but couldn't hear Mr. Borun.  
 [2] THE WITNESS: That's because I have his  
 [3] microphone.  
 [4] MR. SCHWARTZ: We'll see if we can find a way to  
 [5] get both of us.  
 [6] THE COURT: You can approach him, Mr. Schwartz, if  
 [7] it helps you.  
 [8] Isn't technology a wonderful thing?  
 [9] MR. SCHWARTZ: I'm just waiting, your Honor, while  
 [10] he's trying to get it going.  
 [11] Is that any better?  
 [12] THE COURT: It is. Go ahead.  
 [13] MR. HALEY: Thank you.  
 [14] Q: And in Paragraph 6.7 on page 5, you say you were  
 [15] directly involved in the application in the way in which  
 [16] you mentioned in that paragraph; is that right?  
 [17] A: Yes, that's correct.  
 [18] Q: Also, you represented Amgen in a number of their  
 [19] litigations; isn't that correct?  
 [20] A: Yes, I have.  
 [21] Q: And including that, you're one of the trial counsel for  
 [22] Amgen in this lawsuit; is that right?  
 [23] A: Yes, sir, I have an appearance in this case.  
 [24] Q: And you also appeared as their counsel in the Chugai  
 [25] litigation?

[1] A: Yes, I did.  
 [2] Q: And also Amgen-Chugai interference?  
 [3] A: That's correct. That's noted in Paragraph 6.8.  
 [4] Q: Thank you. Now, I'd like you to — to show you two  
 [5] documents. One of them is a handwritten document that has  
 [6] been marked — admitted into evidence as Exhibit 2400, and  
 [7] another is a document which has been marked for  
 [8] identification as NYD, a —  
 [9] THE COURT: Mr. Schwartz, you've got to talk right  
 [10] into the mike, sir, I can't hear you.  
 [11] Ask that question again.  
 [12] Q: The first document is Exhibit 2400. Do you have that?  
 [13] A: Yes, I do, Mr. Schwartz.  
 [14] Q: And the second document is marked for identification as  
 [15] NYD and it's the first five pages of the submission that  
 [16] Amgen made in this lawsuit entitled, "Amgen's Submission of  
 [17] Gels Showing that Amgen's EPO Has a Higher Molecular  
 [18] Weight," and so forth.  
 [19] A: I have Exhibit NYD, which is a submission, plus eleven  
 [20] or twelve attachments.  
 [21] THE COURT: Mr. Schwartz, I've only got one mike  
 [22] that I can rely on here. You go over and stand by  
 [23] Mr. Borun and conduct your investigation — your inquiry  
 [24] from there, if you would. It's just too difficult to hear  
 [25] you.

[1] Now, here's what I've got. You've shown him two  
 [2] documents, Exhibit 2400, and Exhibit For Identification  
 [3] NYD, and you have directed him to the first five pages of  
 [4] NYD.  
 [5] MR. SCHWARTZ: That's correct, your Honor. Can  
 [6] you hear me better now?  
 [7] THE COURT: Much better. Pick up there.  
 [8] Q: Now, I'd like you to look first at page 2 of NYD. And  
 [9] the first full paragraph states: Document constituting  
 [10] TX2400, in paren, the Egrie input document, appears to  
 [11] indicate in November of 1984 Dr. Egrie provided the  
 [12] attorney who prepared the November 30th, 1984 patent  
 [13] application with copies of SDS-PAGE gels accompanied by her  
 [14] analysis of the data TX2400, see Tab 1.  
 [15] Do you find that?  
 [16] A: Yes, I do.  
 [17] Q: And my question is: Isn't it correct that you're that  
 [18] attorney?  
 [19] A: Uhm, I'm the attorney who prepared that application,  
 [20] yes.  
 [21] Q: And you're the attorney referred to in that  
 [22] paragraph — isn't that right? — in that sentence; where  
 [23] it says, Dr. Egrie provided the attorney who prepared it,  
 [24] that's you?  
 [25] A: I think that's what's referred to.

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[1] Q: Do you have any reason to doubt that it's you?  
[2] A: No. I didn't prepare this submission.  
[3] Q: That wasn't my question. My question is: Do you have  
[4] any reason to doubt you're the individual referred to in  
[5] that sentence?  
[6] A: Reading that sentence here for the first time, I have  
[7] no reason to doubt that I'm the attorney being referred to,  
[8] because I prepared that application.  
[9] Q: Thank you.  
[10] Now, going back to — or going first to  
[11] Exhibit 2400, it says on the top, Mike Borun and Mary Boc  
[12] thought the simplest thing to do was to Xerox the relevant  
[13] excerpts for you, notebooks and so forth.  
[14] Do you find that?  
[15] A: I see that, yes.  
[16] Q: And who was Mary Boc?  
[17] A: Mary Boc is an attorney who, in 1984, was an associate  
[18] with my firm.  
[19] Q: And the next page is another note which ends with a  
[20] handwritten note, "Things requested by MFB."  
[21] Do you find that? The next to the last line.  
[22] A: I find that, yes.  
[23] Q: You're the "MFB"; isn't that right?  
[24] A: I would assume so, that Mary Boc is referring to me.  
[25] Q: And on the next page where it says on the right, "Egrie

[1] A: That's my printing, yes.  
[2] Q: That's your file folder?  
[3] A: That's a file folder that I —  
[4] Q: One of your file folders, that's right.  
[5] And going back to NYD, a page we were looking at,  
[6] the second full paragraph says the following: On page 22  
[7] of the Egrie input document, the results of SDS-PAGE gels  
[8] are summarized in a way that parallels the description in  
[9] the '933 patent, Column 28, lines 33 to 50 in pertinent  
[10] part under the title, COS, CHO and native EPO, different  
[11] size of neuraminidase digestion product, Dr. Egrie  
[12] explained that the size of Gene's standard, standard  
[13] urinary EPO, is approximately equal to the size of COS-cell  
[14] produced EPO, and so forth.  
[15] Do you find that?  
[16] A: I find that text, yes.  
[17] Q: Now, would you look, please, at Exhibit 3, if I hand it  
[18] back to you.  
[19] BEC, I'm sorry. Do you have that, Mr. Borun?  
[20] A: Yes, I do, BEC.  
[21] Q: That's one of plaintiff's exhibits. And turn to Column  
[22] 28 for a moment.  
[23] A: I have it, yes.  
[24] Q: That's the material that's referred to in page 2, isn't  
[25] it, starting at line 33 of Column 28, "A preliminary

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[1] input," do you find that?  
[2] A: That's right.  
[3] Q: That's in your handwriting; isn't that so?  
[4] A: Yes. That handwriting is her printing actually, tab of  
[5] a manila folder.  
[6] THE COURT: Wait a minute now. Wait a minute.  
[7] Wait a minute.  
[8] MR. SCHWARTZ: I'm sorry.  
[9] THE COURT: The best microphone that's there  
[10] appears to be that flat speaker microphone. Now,  
[11] Mr. Schwartz, you're doing much better, I can hear you, now  
[12] that you worked in close. I hear Mr. Borun less well, but  
[13] I hear him adequately. But if you touch that microphone  
[14] with your paper —  
[15] MR. SCHWARTZ: What I'll try to do is move it  
[16] closer to Mr. Borun and further from me.  
[17] THE COURT: Fine, but don't touch it. That's the  
[18] one.  
[19] MR. SCHWARTZ: I've moved it closer to him and  
[20] further from me. Can you hear me still?  
[21] THE COURT: Yes, I can.  
[22] Now I have a question of substance. Your last  
[23] question to him referred to — oh, I see, it's the tab here  
[24] where it has "Egrie input." Pick up there. I'm with you.  
[25] Q: That's in your handwriting; correct?

[1] attempt was made to characterize," et cetera?  
[2] A: Page 2 of NYD appears to refer to Column 28, lines 33  
[3] to 50 of the '933 patent, which you just handed to me.  
[4] Yes, that's the reference.  
[5] Q: That's right. And it also talked about page 22 of  
[6] 2400, and that's what I'd like to look at next.  
[7] Page 22, I'm sorry.  
[8] A: That's the page numbered —  
[9] Q: Numbered —  
[10] A: — numbered at the top?  
[11] Q: Hand-numbered at the top, 22. Do you find that?  
[12] A: Yes, I do.  
[13] Q: And that's headed at the top, Roman Numeral V. Do you  
[14] see that? "COS, CHO and native human EPO differ in their  
[15] size and neur" —  
[16] A: Neuraminidase.  
[17] Q: That's better — "digestion products," right? And  
[18] under the note, the first entry is, "Size of Gene's  
[19] standard approximately equal to size of COS-produced EPO as  
[20] was seen in prior Section 4."  
[21] Do you find that?  
[22] A: I'll take your word for it that the word at the end of  
[23] the line in the middle of the page there is "section."  
[24] Q: That's how I read it.  
[25] A: Okay. That appears to be what's being referred to

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[1] in —

[2] Q: And the work you were doing at that time, "Gene's  
[3] standard," is Dr. Goldwasser's pooled EPO; isn't that  
[4] right?

[5] A: It's my understanding that Gene's standard referred  
[6] to — it's my understanding now that Gene's standard refers  
[7] to material that Dr. Goldwater — Goldwasser obtained as a  
[8] pool of urine from aplastic anemia patients.

[9] Q: And going back to Column 28 of the patent, line 40,  
[10] when you wrote, "The pooled source human urinary extract,"  
[11] that's a reference that — to Gene's standard; isn't that  
[12] right?

[13] A: Well, I wouldn't connect it to Gene's standard,  
[14] because — but I was referring to pooled source urinary  
[15] erythropoietin.

[16] Q: And the only — isn't it correct that the only one you  
[17] had been told about at that time was the one that came from  
[18] Dr. Goldwasser?

[19] A: The time being November of 1984?

[20] Q: That's correct.

[21] A: I believe that — well, it's my recollection that the  
[22] information I got from Dr. Lin and his coworkers about  
[23] carbohydrate analysis or characteristics was — involved a  
[24] reference to material from Dr. Goldwasser.

[25] Q: Thank you.

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[1] A: I didn't use the word "standard," but —

[2] Q: I appreciate that, but the pooled source human urinary  
[3] extract was the material received from Dr. Goldwasser; is  
[4] that correct?

[5] A: I don't recall being aware that Amgen had any other  
[6] pooled source urinary EPO product.

[7] Q: Other than this? Other than what it told you it had  
[8] gotten from Dr. Goldwasser?

[9] A: I'm pretty sure I understood that it was  
[10] Dr. Goldwasser's material.

[11] Q: Thank you.

[12] Now, it then goes on to say in the next line of  
[13] page 22, "Size of CHO cell materials is larger than COS or  
[14] Gene's standard."

[15] Do you find that? That's the very next line.

[16] A: Okay.

[17] Q: And then it says, "CHO is —" looks like  
[18] "— approximately equal to Lot 82 EPO."

[19] A: It looks to me like "CH" stands for "carbohydrate,"  
[20] then SDS, then there's a wavy line. It doesn't say  
[21] approximately, it's a wavy line, which isn't approximate,  
[22] to Lot 82 EPO.

[23] Q: It says as seen in Section 3?

[24] A: That's what it says, yes.

[25] Q: If we turn to Section 3, that's on page 6.

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[1] A: I have hand-numbered at the top right, page 6, and  
[2] there's a Roman Numeral III right at the top there.

[3] Q: And that says, "Heterogeneity of native human urinary  
[4] EPO." Do you find that?

[5] A: Yes.

[6] Q: And that says, "Comparison of EPO from two different  
[7] patient sources"; correct?

[8] A: Yes, it does.

[9] Q: And the first source is identified as Gene Goldwasser's  
[10] EPO. Do you find that?

[11] A: Yes.

[12] Q: And that's the pooled EPO we've been talking about;  
[13] isn't that right?

[14] A: Well, I only understood there to be —

[15] Q: One pooled EPO?

[16] A: One source of EPO, and that was the pooled EPO.

[17] Q: And then right under, it says, "Lot 82 urine was  
[18] provided by Kirin Brewery — from Kirin Brewery from  
[19] Japan."

[20] Do you find that? It says the material was  
[21] purified to homogeneity at Amgen, by Amgen and Kirin  
[22] scientists jointly?

[23] A: Urine was provided by Kirin Brewery, it looks like,  
[24] "and is from one patient."

[25] Q: "One patient," I'm sorry. That's right.

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[1] A: "The material was purified to homogeneity at Amgen by  
[2] Amgen and Kirin scientists jointly." That's what it looks  
[3] like to me.

[4] Q: And isn't it correct that that's the Lot 82 EPO which  
[5] is referred to on page 22 that we talked about a few  
[6] minutes ago?

[7] A: I have no reason to doubt that that's — that these are  
[8] references — I mean, the same Lot 82 and Lot 82.

[9] Q: Now, you say, going back to Column 28 of the patent,  
[10] that these studies indicated that the CHO-produced EPO  
[11] material had a somewhat higher molecular weight than the  
[12] COS 1 expression product. Do you find that?

[13] A: Yes.

[14] Q: And the CHO-produced EPO is the EPO that's the  
[15] recombinant EPO that was the subject of Example 12 of the  
[16] patent; right?

[17] A: Example 10. I believe the CHO-produced EPO material  
[18] that was referring here is this — is the material obtained  
[19] from Chinese hamster ovary cells as described in the  
[20] immediately before preceding text of Example 10.

[21] Q: That's right. And the COS-1 expression product, that  
[22] was the — that was the material of both human and monkey  
[23] made in COS cells that was described in the patent; is that  
[24] right?

[25] A: Now, this, the COS-1 material here is using human — it

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[1] says in the third line —  
 [2] Q: Yes.  
 [3] A: — line 35, third line of the paragraph, it says,  
 [4] "Conditioned medium," so it's the stuff outside the cells  
 [5] growing in the medium, "of COS-1," and these are monkey  
 [6] cells, "and CHO," those are Chinese hamster ovary cells,  
 [7] "expression of the human EPO gene."  
 [8] Q: So that was human and COS cells; correct?  
 [9] A: That's correct, that was human and COS cells.  
 [10] Q: And you're reporting here that EPO and CHO had a  
 [11] somewhat higher weight than EPO and COS; right?  
 [12] A: That's right.  
 [13] Q: And then you say the COS was, in turn, slightly larger  
 [14] than the pooled source human urinary extract?  
 [15] A: That's correct.  
 [16] Q: And going back to Note 1, it said, "Size of Gene's  
 [17] standard is approximately equal to the size of COS-produced  
 [18] EPO."  
 [19] Do you find that?  
 [20] A: You're going back to page 22 of 2400?  
 [21] Q: That's correct.  
 [22] A: Middle of the page where it says "note," and it says  
 [23] "approximate EPO," yes.  
 [24] Q: That's correct. And it refers back to Paragraph 4 of  
 [25] this document; correct?

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[1] A: That would be consistent.  
 [2] Q: And —  
 [3] A: Paragraph 4 doesn't — I'm sorry. I'm sorry.  
 [4] Q: Paragraph 4 is on page 17. Are you looking at page 17?  
 [5] A: Have we looked at that before?  
 [6] Q: I don't believe we have. And what it says in  
 [7] Paragraph 4 is: Recombinant monkey and human EPO produced  
 [8] by COS cells have the same molecular weight as native  
 [9] urinary EPO, Goldwasser's EPO. This result indicates that  
 [10] the recombinant EPO is glycosylated to the same extent as  
 [11] the native protein.  
 [12] Do you find that?  
 [13] A: I'm finding it, yeah.  
 [14] Q: And so that's saying that at least the human EPO  
 [15] produced in COS has the same molecular weight as  
 [16] Goldwasser's EPO; correct?  
 [17] A: That appears to be what this document says.  
 [18] Q: That's right. And as I said, on page 22, it — I read  
 [19] from earlier, the reference would be approximately equal to  
 [20] that paragraph; correct? We just looked at that.  
 [21] A: Those are inconsistent.  
 [22] Q: Why are they inconsistent?  
 [23] A: They can't be the same and approximately equal.  
 [24] Q: One says approximately equal to and one says the same.  
 [25] A: Yes.

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[1] Q: Okay. Now, going to the patent, you say in the  
 [2] Paragraph 33 — I'm sorry, Column 28, line 39, "The COS  
 [3] expression product which in turn was slightly larger than  
 [4] the pooled source of human urinary extract."  
 [5] My question is, sir: What information did you  
 [6] have to rely on to write that, in addition to the two  
 [7] references I referred you to in document 2400?  
 [8] A: Well, I'm — that was information that I got from  
 [9] Dr. Lin or his coworkers. I discussed the experiments with  
 [10] them, and that was the sum of the information that I had.  
 [11] Q: That's based on some information that you got in some  
 [12] verbal form; is that right?  
 [13] A: I don't recall getting it in written form.  
 [14] Q: And did you ever compare that information to what we've  
 [15] been looking at in document 2400?  
 [16] A: Yes, I have. In the context of this litigation.  
 [17] Q: I meant at the time you prepared the application.  
 [18] A: I have no recollection of having 2400 at the time I  
 [19] prepared that text of the application.  
 [20] Q: You have no recollection of having it?  
 [21] A: No, I do not.  
 [22] Q: So you can't tell one way or another whether you made  
 [23] any use at all of 2400 in preparing that portion of the  
 [24] application; correct?  
 [25] A: Ah, no, I can't.

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[1] Q: And can you point me to any other writing that you were  
 [2] aware of at the time, other than 2400, that discusses the  
 [3] specific issue to which I'm now talking about, which is why  
 [4] the COS-1 product was, quote, slightly larger than the  
 [5] pooled source human urinary extract here?  
 [6] Do you have any writing in mind that you relied on  
 [7] at that time?  
 [8] A: No, not a writing. No.  
 [9] Q: Nothing. Okay.  
 [10] A: Not that I have nothing, I have no writing.  
 [11] Q: You have no writing, that's right.  
 [12] Now, it's correct, is it not, that in the  
 [13] discussion of urinary EPO, in the paragraph we're talking  
 [14] about, you make no reference to the Lot 82 EPO — isn't  
 [15] that right? — or a single-source EPO? What I'm talking  
 [16] about is Column 28, line 33 to line 50.  
 [17] A: No, I was referring to EPO obtained from, you know,  
 [18] pooled urine from aplastic anemia patients.  
 [19] Q: And that's all you referred to in this paragraph; isn't  
 [20] that right?  
 [21] A: That's all I knew about, yeah.  
 [22] Q: That's all you knew about. So it's your testimony that  
 [23] you never heard of Lot 82 EPO at the time you prepared the  
 [24] application?  
 [25] A: I have no recollection of knowing about Lot 82 EPO at

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[1] the time I prepared the application, the November 1984  
[2] application. That's the text of which is in the  
[3] '933 patent.

[4] Q: Nobody ever told you anything about that at the time?  
[5] A: Not at that time. I don't have any recollection or  
[6] knowledge of a Lot 82 or single-patient source EPO.

[7] Q: So you have no recollection of having ever gotten any  
[8] of the information which Joan Egrie says she sent you in  
[9] Exhibit 2400; isn't that right?  
[10] A: I — I don't — as I said in my deposition, Dr. Egrie  
[11] seems to recall giving it to me in person. I have no  
[12] recollection of that. It appears, from the front of 200,  
[13] that it was sent to me and Mary Boc. And I have no  
[14] recollection of when I had it or whether I looked at it.  
[15] It apparently went into the file marked "Egrie input."  
[16] I had input files from a number of people, but I  
[17] didn't — I have no recollection of looking at this  
[18] collection of documents in preparing the text that you're  
[19] referring to in Column 28. I may have discussed this with  
[20] Dr. Egrie. She seems to recall talking to me about it.  
[21] That doesn't sound unreasonable since, apparently, she and  
[22] a coworker, Dr. Lane, did this work together.

[23] Q: In fact, in Exhibit NYD it states, and we looked at  
[24] this earlier, "On page 22 of the Egrie input document,  
[25] results of SDS-PAGE gels are summarized in a way which

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[1] parallels the description in the '933 patent."  
[2] Do you find that?  
[3] A: I — yeah, I see that. I agree with it.

[4] Q: My question is: Doesn't that refresh your recollection  
[5] that when you prepared the information in Paragraph 28,  
[6] Column — lines 33 to 50, you, in fact, used the  
[7] information from page 22 because, in fact, the information  
[8] is parallel, comes out just the same way; isn't that right?  
[9] A: Does it indicate that I used it? It indicates it's the  
[10] same information. I mean, I got that information from  
[11] someone, Dr. Egrie, Dr. Lin, Dr. Lane. And this NYD says  
[12] it's parallel information.

[13] Q: It says that it's summarized in a way that parallels  
[14] the description in the patent. It doesn't say there's  
[15] parallel information. It says it summarizes in a way that  
[16] parallels the description in the patent.  
[17] And my question is: Doesn't that refresh your  
[18] recollection that in fact, you had page 22 in front of you  
[19] when you wrote that information in the patent?  
[20] A: No. No. This — I didn't prepare NYD, I'm sorry, but  
[21] I agree with it. Now, sitting here essentially as counsel  
[22] for Amgen, I agree with that statement made by other  
[23] counsel for Amgen.

[24] Q: That is, summarized it in a way that parallels the way  
[25] it's summarized in the patent?

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[1] A: I think that's accurate.

[2] Q: But having seen that, you don't have any reason to  
[3] believe that you actually used that to write it so it turns  
[4] out in that fashion?  
[5] A: No, I don't. What you see here in Column 28 is  
[6] something that was constructed by information given to me  
[7] and passed through Dr. Lin, and that's it.

[8] Q: What, if at all, do you attribute the parallelism to  
[9] that's referred to in this memo?  
[10] MR. KNOX: Your Honor, this Mr. Casebeer, there's  
[11] no foundation for that question since Mr. Borun already  
[12] testified he did not see this memo or have any role in it,  
[13] apparently.

[14] THE COURT: It's not necessary to argue every  
[15] objection unless — until I've made a ruling.  
[16] The objection is overruled. He may answer if he  
[17] can.

[18] A: I'm sorry, I've lost the question.

[19] THE COURT: He's asking you why you think that,  
[20] why it's so. Why does the patent summarize it in the way  
[21] it is summarized there in 2400, if you know?  
[22] THE WITNESS: Okay. Well, your Honor, I just  
[23] agreed with the statement today and I can give you my  
[24] construction of this document today in comparing it to this  
[25] one, as an attorney. I didn't have page 22 in front of me

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[1] when I wrote this.

[2] THE COURT: I understand that's your — wait. I  
[3] understand that's your position. But he's asking you why  
[4] the parallelism, and I'd like to hear your explanation  
[5] today, if you can give me any.

[6] THE WITNESS: Sure. Your Honor, it's — it  
[7] suggests a stepwise kind of experimental result where you  
[8] have three things, none of them are equal to each other,  
[9] okay, and they line up, the three of them. So you have one  
[10] that's clearly the heaviest or the larger molecular weight,  
[11] that means it doesn't go as far on the gel, then you have  
[12] two others. The first one is the Chinese hamster ovary  
[13] stuff. And you have two others and they aren't the same.  
[14] So you've got, like, three steps. They're — each  
[15] of the others is different from the Chinese hamster  
[16] ovaries.

[17] Then on page 22, it goes on to address the  
[18] difference between urinary and COS cell material after  
[19] neuraminidase treatment to say that the urinary and COS  
[20] cells are different.

[21] So that's also consistent with it. But, your  
[22] Honor, that's really a construction I'm doing here for you  
[23] today.

[24] THE COURT: I appreciate it. And I understand  
[25] that's what Mr. Schwartz was asking and I just allowed him

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(1) to have it.  
(2) Go ahead, Mr. Schwartz.  
(3) Q: A couple of brief questions, a couple on Exhibit 2400,  
(4) and we'll move on. Just look at page 6 for a minute. We  
(5) talked a little bit about that.  
(6) Under the summary, that says, "Gene's EPO is  
(7) 3400 — 34,000 MW, Lot 82 EPO is 35 to 36K." That's a  
(8) reference to the molecular weight of the different EPOs;  
(9) isn't that right?  
(10) A: That's what I would read today.  
(11) Q: In daltons, one is 34,000, the other is approximately  
(12) 35 to 36?  
(13) THE WITNESS: Your Honor, just for your  
(14) information, we're looking at page 6 of 2400, and  
(15) Mr. Schwartz has called my attention to a little bit down  
(16) the page, heading "Summary," and it's the second sentence  
(17) that he's read to me. And he's asked me if I think that's  
(18) a reference to molecular weight in daltons, and I said that  
(19) as I read this, it's a fair characterization.  
(20) Q: The second point of it is the difference in molecular  
(21) weight is most probably a difference in the extent of  
(22) glycosylation. And my question is: Do you have any  
(23) recollection of being told that at that time?  
(24) A: In November of '84?  
(25) Q: That's right.

(1) directly supported and directed to the preceding column —  
(2) proceeding paragraph, that's the conclusion that flows from  
(3) Column 28 starting at line 29; isn't that right?  
(4) A: Probably 28, line, let's say, 33.  
(5) Q: Thirty-three, I'm sorry.  
(6) A: Yeah, that's a fair statement that this summary at the  
(7) top of Column 29 addresses the previously mentioned  
(8) characterizations, yes.  
(9) Q: That's right. And there came a time when you learned  
(10) that the information in Paragraph 50 — in Column 28,  
(11) starting line 51 to the end was wrong; isn't that right?  
(12) A: There came a time when I found out that the hexose  
(13) value for the recombinant product was probably wrong, and  
(14) that the fucose value for both the recombinant and the  
(15) urinary product was probably wrong.  
(16) Q: That's right. And that time was probably no later than  
(17) 1990, 1991 — isn't that right? — in and around that time  
(18) frame?  
(19) A: That's a good estimate. It was in the context of  
(20) submissions in the inference.  
(21) Q: Now, you never did anything to correct that in this  
(22) patent; isn't that right?  
(23) A: No. Those are the values that we had when it was  
(24) written in 1984 so, I mean, you can't go back and change  
(25) things.

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(1) A: No.  
(2) Q: Never learned any of this in that time; right?  
(3) A: Not in that time frame. This document came up in the  
(4) interference and —  
(5) Q: I'm just asking for that time frame. Your answer is  
(6) no?  
(7) A: My answer is no, sir. Sorry.  
(8) Q: And that's, presumably, if I go through any of the  
(9) other detail, it will probably be the same answer, I guess;  
(10) right? You don't recall anything in this document?  
(11) A: I don't recall having this document or reading anything  
(12) in this document when I was preparing the November '84  
(13) application. I had, obviously, information that this  
(14) development relates to, that's what I used to prepare the  
(15) graph.  
(16) Q: Thank you. Now, I believe going on in the patent to  
(17) the remainder of Column — of that column, Column 26 — I'm  
(18) sorry, Column 28, there's then information starting at  
(19) line 51 concerning carbohydrate analysis; correct?  
(20) A: Yes. This is carbohydrate analysis, starting at  
(21) Column 28, line 51 and going across the next column.  
(22) Q: That's right. And it would be fair to say, wouldn't  
(23) it, that when you go to Column 29, in your conclusion,  
(24) "Glycoprotein products provided by the present invention,"  
(25) and so forth, that information in that paragraph is really

(1) Q: Now, you filed a number of continuation applications  
(2) based on this patent, on that application; isn't that  
(3) right?  
(4) A: That's right.  
(5) Q: And in fact, each of the patents in suit is based on a  
(6) continuation application filed subsequent to 1991; isn't  
(7) that right?  
(8) A: Mr. Schwartz —  
(9) Q: I'll give you —  
(10) A: I would agree with you subject to correction.  
(11) Q: I can't keep all of these in my head. This might help.  
(12) A: Can I agree with you, subject to correction, or should  
(13) I just figure out the colors and...  
(14) Q: No, basically, to go through it quickly, I mean, it  
(15) just shows that the five patents in suit are in orange, and  
(16) at least the last applications were filed in either '95,  
(17) four of them, and one of them in '93. That's the simple  
(18) point.  
(19) A: Well, that's what this shows.  
(20) Q: I'll represent that's accurate, okay?  
(21) A: Okay.  
(22) Q: Based on that, isn't it correct that when you filed  
(23) each of those continuation applications, you never did  
(24) anything to take out this incorrect carbohydrate data;  
(25) isn't that right?

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[1] A: Well, at least some of those I didn't file, but, no,  
[2] there were no — it's called a continuation application.  
[3] The specification stays the same as it was and has the same  
[4] information that we had in 1984.  
[5] Q: And so when you decided to get additional applications  
[6] based on that disclosure, you didn't correct what you knew  
[7] then to be a mistake; isn't that right?  
[8] A: It wouldn't be a continuation application, then. If  
[9] there were changes in the data, then that would be a  
[10] continuation-in-part application. So that's not a  
[11] continuing attempt to secure patent protection based on the  
[12] same information that was filed in 1984.  
[13] Q: The reason, the consequence of that, of filing it as a  
[14] continuation application, is filing it with data known to  
[15] be wrong — isn't that right? — at least with respect to  
[16] that paragraph? Isn't that what you did in at least four  
[17] of the five?  
[18] A: The reason for filing the continuation application is  
[19] to reserve the original filing date. And at the original  
[20] filing date, there was no knowledge that this information  
[21] was wrong. This was the best information we had.  
[22] So when you file a continuing application, you  
[23] preserve the original, the original date. So in other  
[24] words, so that's what we had in 1984.  
[25] If we wanted a new date, we had a new invention

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[1] and we wanted to add some other kinds of information, that  
[2] would have an effective date of when you filed that.  
[3] Q: I don't want to argue with you about it. I take it  
[4] from what you're saying, you viewed this as an appropriate  
[5] use of the patent laws?  
[6] A: No, absolutely.  
[7] Q: There's no doubt that you were aware that that  
[8] information was false when these continuation applications  
[9] were filed; isn't that right?  
[10] A: No, it's not false. It's the information we had. I  
[11] can't go back — I can say it's wrong, but I can't go back  
[12] and say it was false.  
[13] Q: As of the date you filed the continuation application,  
[14] each of which was later than 1991, you knew that as of  
[15] 1993, '95, what you were putting in it to rely on going  
[16] back to an early date was incorrect data; that's all I'm  
[17] asking?  
[18] A: I knew that the hexose value for the Chinese hamster  
[19] ovaries analysis was incorrect probably, even though that's  
[20] what Dr. Lin gave us. And I knew that the fucose value was  
[21] incorrect for both the Chinese hamster ovary product, and  
[22] the urinary EPO as of the point in time that you said,  
[23] sometime certainly by 1990.  
[24] These applications were filed later than 1990,  
[25] they all relied back to 1984. And at the time in 1984 when

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[1] that information went in, it was correct.  
[2] Q: Isn't it correct that in other countries of the world,  
[3] when you filed later applications, you corrected that data?  
[4] A: No. It occurred in South Africa that in the context of  
[5] this proceeding, our South African counsel, when advised  
[6] that the hexose values and fucose values were incorrect,  
[7] said take it out.  
[8] And in Europe, in the appeal, when the European  
[9] Board of Appeals were advised that those were incorrect,  
[10] they said, not just attorneys, the European Board of  
[11] Appeals said, Well, get it out of there.  
[12] Q: So at least in Europe and in South Africa, that  
[13] information ended up being taken out of the counterpart  
[14] package; isn't that right?  
[15] A: The South African counsel advised it and the European  
[16] Patent Board of Appeals, the highest tribunal in Europe  
[17] said, Oh, yeah, take it out, it didn't have any effect.  
[18] Q: Isn't it correct that you made numerous corrections to  
[19] the '933 patent? In other words, you filed certificates of  
[20] correction with all sorts of different corrections; isn't  
[21] that right?  
[22] A: Those are corrections in the text and they fall into  
[23] two parts. One set, you know, things that we had in there  
[24] originally that were wrong, typographical errors, and also  
[25] errors that the patent office made in the printing process.

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[1] So that's a Certificate of Correction, goes —  
[2] doesn't go to any substantive change in the patent, doesn't  
[3] say white is back, black is white. It just says this word  
[4] is misspelled.  
[5] Q: What you're saying is that you didn't believe it would  
[6] be appropriate to change that information by Certificate of  
[7] Correction?  
[8] A: No, that's the information we had. I mean, there was  
[9] nothing wrong with that information when it was put out.  
[10] Q: Even though by the time you filed continuation  
[11] applications you knew it was wrong; right?  
[12] A: When we filed the continuation application, we asked  
[13] for our November 1984 date. And as of November 1984, that  
[14] was the best information we had. It was only during the  
[15] interference that Dr. Lin's raw data came in and it could  
[16] be determined that Dr. Yu made a mistake, the person  
[17] trusted to do this analysis at Yale University.  
[18] Q: Isn't it correct that you believed if you changed that  
[19] information you'd lose your early filing date; isn't that  
[20] what you told me?  
[21] A: With respect to a claim, for example, that went to  
[22] those specific data points. If I had a claim that then  
[23] said with the hexose — a recombinant product with the  
[24] hexose ratio vis-a-vis urinary of 15.09, and I wanted to  
[25] change that to 1.62 or something like that, I'd only be



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[1] entitled to that later date for the 1.62. I don't have any  
[2] claims like that.  
[3] Q: So at least as to that, you'd agree that it would be a  
[4] problem; right?  
[5] A: No, it's not a problem. You're only entitled to the  
[6] date you put it in.  
[7] Q: I understand what you're saying.  
[8] Now, I'd like to go to the prosecution of the  
[9] '933 patent for a moment, and I'd like you to look at  
[10] Exhibit NWP, which I believe has been admitted as 2131 — I  
[11] guess 2161.  
[12] Do you find that?  
[13] A: I have that. Yes, I do.  
[14] Q: That's an amendment and your response that you  
[15] submitted in connection with the parent application or one  
[16] of the applications in the chain of '933; right?  
[17] A: I think — I'll take your word for it.  
[18] Q: Sure. You're welcome to look at that.  
[19] A: I'll agree with that subject to correction.  
[20] Q: Okay. And on page 4 is an example of a claim pending  
[21] there, but claim 87 which has the phrase, "Having  
[22] glycosylation which differs from that of human urinary  
[23] EPO."  
[24] Do you find that?  
[25] A: On page 4, which is —

[1] inevitably different in its glycosylation from urinary EPO  
[2] is manifest from the attached copy of the January 1994  
[3] expert statement of Dr. Richard Cummings," so forth; right?  
[4] A: That's what it says, yes.  
[5] Q: And so that's what you were arguing to the examiner at  
[6] that time, isn't it; that recombinant EPO is inevitably  
[7] different in its glycosylation from urinary EPO? Correct?  
[8] A: Different, that's "inevitably." I think that's  
[9] probably Dr. Cummings' word in the attachment.  
[10] Q: It's your word in the amendment, isn't it? It's your  
[11] word in the argument?  
[12] A: Well, I'm referring to Dr. Cummings' statement.  
[13] Q: You wrote those words. That's what you said, isn't it?  
[14] A: Yes, I did.  
[15] Q: Thank you.  
[16] And you attached Dr. Cummings' declaration?  
[17] A: Yes, I did. It was a declaration that he prepared for  
[18] Europe.  
[19] Q: And I mention parenthetically there's been some  
[20] question about whether the declaration was attached or not.  
[21] As far as I'm concerned, it was attached and it's there,  
[22] and we don't have any quarrel with that.  
[23] A: I think the examiner referred to it in the subsequent  
[24] action, so it was there.  
[25] Q: I did say that to cut away any underbrush or squabbling

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[1] Q: 909 at the bottom.  
[2] A: Document AM27020909, the text there of claim 87 has the  
[3] wording, "and having glycosylation which differs from that  
[4] of human urinary erythropoietin," so it means that it was  
[5] in claim 87 originally, that's why it's not underscored.  
[6] The new stuff is underscored. The old stuff is in  
[7] brackets.  
[8] Q: If I didn't make it plain at the beginning, this is an  
[9] amendment that you prepared on or about the date it bears,  
[10] and namely, February 16th, 1995; correct? It says it on  
[11] page 12.  
[12] A: I believe that's right.  
[13] Q: And going on from there, on page 8 you discuss — on  
[14] page 6, I'm sorry, you discussed the rejection of claim 87.  
[15] Do you find that?  
[16] A: Prior rejection before the amendment, right.  
[17] Q: That's correct. You have a reference to the rejection  
[18] under Roman Numeral II.  
[19] Do you find that?  
[20] A: Yes. Second full paragraph says —  
[21] Q: Exactly. And then going on to page 8 and 9, you say at  
[22] the bottom of page 8 and top of page 9, "As confirmed by  
[23] the Takeuchi article cited by the Examiner, the  
[24] glycosylation of recombinant EPO products is different from  
[25] that of urinary EPO. The fact that recombinant EPO is

[1] which awakened me about 11:00 last night.  
[2] A: I'm sorry.  
[3] Q: I take it in making this argument, as of this time, you  
[4] still didn't know anything about Exhibit 2400, the Egrie  
[5] input; is that correct?  
[6] A: No. I think this was sent in in February of '95, and I  
[7] said I knew about the existence of the document prior to  
[8] 1995.  
[9] Q: I take it, though, that you never brought to the  
[10] attention of the examiner the information in the Egrie  
[11] document that we went through earlier; isn't that right?  
[12] A: The examiner had that information in the form of —  
[13] this document was in in the interference, and the issue of  
[14] similarities and differences between urinary and  
[15] recombinant was an issue in the interference cited  
[16] favorably to Amgen.  
[17] THE COURT: Mr. Borun, Mr. Borun, wait. Wait a  
[18] minute. Wait a minute. Mr. Borun, when you say "this  
[19] document" was in in the interference, to what document do  
[20] you refer?  
[21] THE WITNESS: The document that we have been  
[22] referring to as the Egrie input document, your Honor.  
[23] THE COURT: Thank you.  
[24] THE WITNESS: That's Trial Exhibit 2400, was an  
[25] exhibit in the interference.