SO INSTRUCTED FROM DU PONT BUT THAT HE DID IT AS A CONSEQUENCE OF.

MR. FIGG: NO. THAT WASN'T WHAT MR. PASAHOW SAID.

(PAUSE IN PROCEEDINGS)

THE COURT: CAN YOU GO BACK TO THAT POINT?

THE REPORTER: IT'LL TAKE AWHILE TO FIND.

MR. FIGG: WELL, IF I AM PERMITTED TO SAY THE DU PONT LAWYERS NEVER KNEW ABOUT IT AND NEVER TOLD HIM TO CHANGE HIS BOOK, I'LL BE SATISFIED.

THE COURT: OKAY.

MR. PASAHOW: I DON'T HAVE ANY OBJECTION TO THAT.

THE COURT: OKAY. FINE.

(OPEN COURT, JURY PRESENT:)

THE COURT: WE'RE GOING TO FINISH UP AND I THINK YOU'D PREFER TO DO THAT; RIGHT?

THE JURORS: (NODDING HEAD.)

(PAUSE IN PROCEEDINGS)

MR. FIGG: I'LL TRY TO BE BRIEF.

CLOSING ARGUMENT BY

MR. FIGG: MR. PASAHOW STARTED HIS CLOSING ARGUMENT WITH A STORY ABOUT AIRPLANES, AND I THINK THAT STORY CAN BE VERY INSTRUCTIVE TO US HERE.

I'M NOT SURE MR. PASAHOW'S EVER SEEN THE WRIGHT BROTHERS PATENTS, BUT THE WRIGHT BROTHERS DIDN'T PATENT THE AIRPLANE. THE WRIGHT BROTHERS INVENTED A TECHNIQUE FOR

CONTROLLING THE AIRPLANE THAT THEY CALLED WING WARPING, AND THAT'S WHAT THEY PATENTED.

DR. LANGLEY WOULDN'T HAVE HAD TO HAVE GONE BACK TO THE WRIGHT BROTHERS AND ASKED PERMISSION TO USE WHAT HE HAD DONE, BECAUSE THE WRIGHT BROTHERS PUT IN THEIR PATENT WHAT THEIR INVENTION REALLY WAS, WHICH WAS AN IMPROVEMENT ON THE AIRPLANE.

THAT BEARS NO RELATIONSHIP TO THE CLAIMS IN THE CETUS PATENTS. CETUS HAS CLAIMED EVERYTHING, AND CETUS, BY CLAIMING EVERYTHING, HAS COVERED WHAT WAS DONE IN THE KHORANA LABORATORY WITH THEIR PATENT.

HAD THEY LIMITED THEIR PATENT TO WHAT THEY HAD REALLY INVENTED, HAD THEY LIMITED IT TO THE -- WHAT THOSE CRITICAL CONDITIONS ARE, WHICH I ASKED TIME AND AGAIN FOR THEIR WITNESSES TO IDENTIFY BUT COULD NEVER FIND OUT, THEN THEIR PATENT WOULD HAVE PERHAPS BEEN A LITTLE EASIER FOR THE REST OF THE WORLD TO TAKE.

NOW, MR. PASAHOW READ YOU SOME OF JUDGE PATEL'S INSTRUCTIONS, BUT I WOULD LIKE TO READ YOU SOME PORTIONS OF THOSE SAME INSTRUCTIONS THAT HE LEFT OUT:

HE READ YOU AN INSTRUCTION ON ENABLEMENT AND HE STOPPED SHORT OF THE END OF THAT ONE. THAT INSTRUCTION CONTINUES:

"IN DETERMINING WHETHER THE DISCLOSURE" -- IN OTHER WORDS, THE DISCLOSURE OF A PRIOR ART REFERENCE -- "IS COMPLETE, ENABLING AND MEANINGFUL, YOU SHOULD TAKE INTO ACCOUNT WHAT WOULD HAVE BEEN

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WITHIN THE KNOWLEDGE OF THE PERSON OF ORDINARY SKILL IN THE ART AT THE TIME, AND YOU MAY CONSIDER OTHER PUBLICATIONS WHICH SHED LIGHT ON THE KNOWLEDGE THAT SUCH A PERSON WOULD HAVE."

SO IT'S THE KNOWLEDGE OF THIS PERSON OF ORDINARY SKILL IN 1984 WHO HAS BENEFITED FROM A DECADE OF IMPROVEMENTS, A DECADE OF EXPLOSIVE GROWTH IN THE FIELD OF BIOTECHNOLOGY, WHICH IS TO BE COMBINED WITH WHAT IS TAUGHT IN THE KHORANA PRIOR ART TO DECIDE WHETHER THAT PRIOR ART IS -- RENDERS THE CLAIMS OF THE CETUS PATENTS OBVIOUS OR ANTICIPATES THEM.

THERE WAS ANOTHER INSTRUCTION THAT MR. PASAHOW READ TO YOU CONCERNING ANTICIPATION, AND AGAIN HE LEFT OUT THE END OF THAT ONE, WHICH I WOULD LIKE TO READ TO YOU.

"IF THE DISCLOSURE IS SUFFICIENT TO SHOW THAT THE NATURAL RESULT FLOWING FROM THE OPERATION AS TAUGHT WOULD RESULT IN THE PERFORMANCE OF THE QUESTIONED FUNCTION, IT SEEMS TO BE WELL SETTLED THAT THE DISCLOSURE SHOULD BE REGARDED AS SUFFICIENT."

NOW, WHAT COULD BE MORE OF A NATURAL FLOW THAN IF YOU DOUBLE THE ORIGINAL TEMPLATE STRANDS? YOU CREATE A PRODUCT WHICH WILL SERVE AS A TEMPLATE IN THE NEXT REACTION.

(PAUSE IN PROCEEDINGS)

MR. FIGG: MR. PASAHOW REFERRED TO THE NSF GRANT APPLICATION, AND HE SAID THAT THIS LANGUAGE "REPEAT CYCLE" MEANS REPEAT CYCLE OVER AND OVER WITH THE ORIGINAL DUPLEX.

AFTER THESE TWO STRANDS HAVE FILLED OUT, WHERE IS THE ORIGINAL DUPLEX? IT DOESN'T EXIST ANYMORE. PART OF IT WENT HERE (INDICATING) AND PART OF IT WENT HERE (INDICATING).

DR. KHORANA CLEARLY DIDN'T MEAN BY THIS THAT NOW YOU SHOULD SOMEHOW TAKE THESE BACK APART, PUT THEM BACK TOGETHER, AND REFORM THE ORIGINAL DUPLEX SO YOU CAN DO IT OVER. HE'D BE GOING IN THE WRONG DIRECTION IF HE WAS PROPOSING THAT KIND OF A REACTION.

CLEARLY WHAT DR. KHORANA MEANS HERE IS THAT YOU COMPLETE THE DOUBLING OF THE ORIGINAL DUPLEX THAT'S PRESENT IN THAT CYCLE OF THE REACTION.

SO IN THE NEXT CYCLE OF THE REACTION, THIS (INDICATING) FILLED OUT THE PRODUCT AND THIS FILLED-OUT PRODUCT WOULD NOT CONSTITUTE THE ORIGINAL DUPLEX.

THIS IS ANOTHER EXAMPLE OF HOW CETUS TRIES TO DISTORT THE LANGUAGE OF THIS. FIRST, THEY ARGUE THAT "DOUBLING" DOESN'T REALLY MEAN DOUBLING; NOW THEY ARGUE "REPEAT" DOESN'T REALLY MEAN REPEAT.

MR. PASAHOW REGISTERED A MILD COMPLAINT ABOUT THE FACT THAT I WOULD BE GOING LAST TODAY AND HE WOULDN'T HAVE AN OPPORTUNITY TO RESPOND TO ME.

I THINK MR. PASAHOW MIGHT APPRECIATE THE FRUSTRATION THAT DU PONT FELT IN THE PATENT OFFICE WHEN IT SUBMITTED ITS SUBMISSION TO THE PATENT EXAMINER ONLY TO SIT BACK AND WATCH CETUS AND HOFFMAN-LAROCHE INUNDATE THE PATENT EXAMINER WITH

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ARGUMENTS AND AFFIDAVITS AND SO FORTH UNTIL THE PATENT EXAMINER GAVE IN TO THEIR -- TO THEIR WISHES.

THERE WAS A LOT OF DISCUSSION ABOUT WHO SHOULD HAVE CITED THE NSF GRANT APPLICATION TO THE PATENT OFFICE. THE FACT OF THE MATTER IS, THAT IS COMPLETELY IRRELEVANT TO THIS CASE. THERE HAS BEEN A LOT OF DISCUSSION OF THAT BY BOTH SIDES.

BUT THE OTHER FACT OF THE MATTER IS THAT MR. PASAHOW KNOWS WELL MR. DE GRANDI TESTIFIED THAT DU PONT DID NOT KNOW OF THE NSF GRANT APPLICATION WHEN IT FILED ITS ORIGINAL REQUEST FOR RE-EXAMINATION.

AFTER THAT REQUEST FOR RE-EXAMINATION WAS FILED, DU PONT WAS OUT OF THE GAME. DU PONT COULD NOT SUBMIT THAT DOCUMENT.

CETUS, ON THE OTHER HAND, WAS UNDER AN OBLIGATION. IT WAS THEIR OBLIGATION AS A PATENT APPLICANT TO SUBMIT THAT DOCUMENT TO THE PATENT OFFICE. THEY DIDN'T DO IT.

THEY SAY THEY DIDN'T DO IT BECAUSE THEY DIDN'T HAVE THE APPLICATION. WHAT THEY HAD WAS A FORM OF THE APPLICATION WITH SOME HANDWRITTEN NOTES ON IT.

FINE. THE BOTTOM LINE IS, THE PATENT EXAMINER NEVER HAD IT, NEVER CONSIDERED IT.

NOW, THE . . . THERE WAS DISCUSSION OF DR. KORNBERG'S BOOK AND THE STATEMENTS THAT DR. KORNBERG HAS MADE ABOUT PCR.

MR. PASAHOW READ YOU A SECTION OF MR. -- DR. KORNBERG'S TESTIMONY ABOUT WHETHER PCR WOULD HAVE BEEN OF INTEREST, BUT HE

DIDN'T READ THE QUESTION WHERE I ASKED HIM:

"WOULD IT HAVE BEEN A REACTION THAT MANY LABORATORIES COULD HAVE TAKEN ADVANTAGE OF IN 1970?"

DR. KORNBERG SAYS: "THAT'S THE PROBLEM. WE WOULD HAVE LOVED TO HAVE DONE IT FOR A VARIETY OF REASONS IN OUR BASIC RESEARCH, BUT AS WE HAVE SAID SEVERAL TIMES, WE DIDN'T HAVE THE PRIMERS, AND EVEN IF WE'D HAD THE PRIMERS, WE WOULDN'T KNOW WHAT PRIMERS TO MAKE BECAUSE WE DIDN'T KNOW THE SEQUENCE OF THE DNA. SO WE HAD THE POLYMERASE, WHICH VERY FEW LABS HAD, BUT WE DIDN'T HAVE DNA SEQUENCING AND WE DIDN'T HAVE PRIMERS."

AND IN 1984 WHEN CETUS REDISCOVERED THIS REACTION, THAT -- NEITHER OF THOSE THINGS WERE CONCERNS. SEQUENCING WAS BEING DONE ON A ROUTINE BASIS IN LABORATORIES SUCH AS THE LABORATORIES AT CETUS, AND PRIMERS WERE BEING CHURNED OUT BY AUTOMATED EQUIPMENT.

IT'S VERY EASY TO CRITICIZE THE KHORANA PRIOR ART WHEN YOU CONSTRAIN YOURSELF TO THE STATE OF THE ART IN 1970 OR 1972.

BUT WHEN YOU READ THAT PRIOR ART IN THE CONTEXT OF WHAT A SKILLED PERSON KNEW IN 1984, IT'S A TOTALLY DIFFERENT MATTER, AND THAT IS THE STANDARD THAT IS TO BE APPLIED HERE BECAUSE THAT, AS YOU RECALL FROM JUDGE PATEL'S INSTRUCTIONS, ONE YEAR BEFORE THE FILING DATE OF THE CETUS PATENTS IS THE CRITICAL DATE FOR DETERMINING WHETHER OR NOT THOSE PATENTS HAVE ANY VALIDITY.

(PAUSE IN PROCEEDINGS)

MR. FIGG: MR. PASAHOW ALSO MADE A COMMENT THAT DR. KORNBERG CITED THE KLEPPE REFERENCE IN HIS NEW VERSION OF HIS BOOK AFTER BEING REMINDED TO DO SO BY DU PONT'S LAWYERS.

THAT IS SIMPLY NOT THE CASE. DU PONT BROUGHT THE KHORANA PRIOR ART TO DR. KORNBERG'S ATTENTION. WHEN WE DID THAT, WE DIDN'T KNOW THAT DR. KORNBERG HAD A BOOK, A NEW REVISION OF HIS BOOK.

HE DID NOT MAKE THAT REVISION AT A SUGGESTION OF A DU PONT LAWYER OR ANYONE ELSE CONNECTED WITH DU PONT, BECAUSE WE DIDN'T KNOW THAT HE WAS EVEN WRITING A BOOK. HE DECIDED ON HIS OWN.

HE READ THE KLEPPE PAPER AND HE SAID, YEAH, THAT DISCLOSES PCR. I'M GOING TO CITE THAT IN MY BOOK. AND HE DID, JUST AS YOU'VE SEEN SEVERAL OTHER SCIENTISTS WHO HAVE NOW LEARNED OF THE KHORANA PRIOR ART HAVE CITED IT IN THEIR PUBLICATIONS. THEY HAVE CITED KHORANA AND, IN PARTICULAR, THE KLEPPE PAPER AS THE ORIGINATOR OF THE REACTION THAT WE NOW KNOW AS PCR.

MR. PASAHOW SHOWED YOU SOME COPIES OF SOME MEMOS THAT CAME FROM DU PONT.

AGAIN, MR. PASAHOW KNOWS VERY WELL FROM THE TESTIMONY OF DR. MILLER THAT DU PONT FIRST LEARNED OF, FIRST DISCOVERED, THE KHORANA PRIOR ART BACK IN DECEMBER OF 1988. THESE MEMOS THAT MR. PASAHOW SHOWED YOU WERE WRITTEN BY SCIENTISTS AT DU PONT BEFORE THEY HAD ANY KNOWLEDGE OF THAT KHORANA PRIOR ART.

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I THINK THIS LAWSUIT DEMONSTRATES THAT THEIR VIEW OF PCR HAS CHANGED CONSIDERABLY SINCE THEY LEARNED OF THE KHORANA PRIOR ART, JUST AS DR. KORNBERG'S DID.

MR. PASAHOW SHOWED YOU THE BOOKS WRITTEN BY DR. SAMBROOK. HE DIDN'T SHOW YOU THE DECLARATION THAT DR. SAMBROOK FILED IN THE PATENT & TRADEMARK OFFICE IN WHICH DR. SAMBROOK SAID, "I'VE NOW READ THE KHORANA PRIOR ART, AND IT FULLY DESCRIBES THE PROCESS THAT'S BEING CLAIMED IN THE '202 PATENT."

SO WHY ARE THESE SCIENTISTS CHANGING THEIR MIND? THEY'RE NOT CHANGING THEIR MIND; THEY'RE GETTING SOME ADDITIONAL INFORMATION. AND BASED ON THAT ADDITIONAL INFORMATION, THEY'RE COMING TO THE LOGICAL CONCLUSION THAT THE KHORANA PRIOR ART PREEMPTED, WAS THE FIRST DISCOVERY OF THE REACTION THAT IS CLAIMED IN THE CETUS PATENTS.

NOW, DOCTOR -- MR. PASAHOW REFERRED AGAIN TO THE CONDITIONS THAT WERE DISCOVERED BY DR. KARY MULLIS. AGAIN, I WISH WE KNEW WHAT THOSE CONDITIONS WERE, AND I WISH THEY WERE IN THE CLAIMS, BUT THEY'RE NOT.

BUT WHAT WE CAN LOOK AT ARE SOME OF THE STATEMENTS THAT CETUS' SCIENTISTS HAVE MADE OUTSIDE OF THE COURTROOM REGARDING HOW DIFFICULT IT IS TO COME UP WITH THE CONDITIONS FOR PRACTICING PCR.

AND YOU RECALL THIS MEMORANDUM THAT DR. HENRY ERLICH WROTE. THIS MEMORANDUM WAS WRITTEN ON NOVEMBER 4TH, 1985.

NOW, CETUS DISAGREES WITH OUR INTERPRETATION OF THE

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EVENTS THAT LED UP TO THIS MEMORANDUM. AND IT MAY BE THAT CETUS' INTERPRETATION OF THOSE EVENTS THAT LED UP TO THIS MEMORANDUM ARE CORRECT.

BUT THE FACT REMAINS THAT WHEN THIS MEMORANDUM WAS WRITTEN, THE ONLY THING THAT CETUS HAD SAID TO ANYONE ABOUT PCR WAS SAID AT THE OCTOBER 1985 HUMAN GENETICS MEETING.

AND YOU WILL RECALL DR. SNINSKY'S TESTIMONY THAT WHAT WAS DISCLOSED AT THAT HUMAN GENETICS MEETING WAS WHAT HE CALLED THE BASIC PRINCIPLE OF PCR.

AT THE TIME OF THIS MEMO, CETUS HAD PUBLISHED NOTHING ELSE. WHEN THIS MEMO WAS WRITTEN, THE SCIENCE ARTICLE THAT IS REFERRED TO HAD BEEN SUBMITTED, BUT YOU'VE LEARNED IT HAD NOT YET BEEN ACCEPTED FOR PUBLICATION.

LEAVING ALL THAT ASIDE, THOUGH, LOOK AT THE LANGUAGE THAT DR. ERLICH USED.

HE SAID: "ONCE THE FUNDAMENTAL PRINCIPLE OF PCR HAS BEEN DISCLOSED." HE DIDN'T SAY "ONCE ALL OF THE DETAILS OF THIS PAPER THAT WE'RE GOING TO PUBLISH ARE DISCLOSED."

HE SAID: "ONCE THE FUNDAMENTAL PRINCIPLE OF PCR HAS BEEN DISCLOSED, ANY GOOD MOLECULAR BIOLOGIST WILL BE AWARE OF THE RELEVANT PARAMETERS TO EXPLORE. . . FOR EXAMPLE, TIME OF INCUBATION, REAGENT (PRIMERS AND ENZYMES . . ." -- AND THESE BUILDING BLOCKS -- "CONCENTRATION, TEMPERATURE, LENGTHS OF PRIMERS, ET CETERA. EVEN THE APPROACHES THAT ARE ONLY

SEMI-OBVIOUS . . . WILL BE APPARENT EVENTUALLY."

THE KHORANA PRIOR ART DISCLOSES THE FUNDAMENTAL PRINCIPLE OF PCR AND A LOT MORE.

DR. ERLICH WAS CORRECT WHEN HE WROTE THIS. WE COULDN'T HAVE WRITTEN A BETTER SUMMARY OF OUR POSITION ON THIS HAD WE TRIED. ANY GOOD MOLECULAR BIOLOGIST WOULD BE AWARE OF WHAT TO LOOK AT.

THIS ISN'T THE ONLY THING THAT DR. ERLICH WROTE ON THAT SUBJECT, THOUGH.

YOU'LL RECALL A LETTER THAT DR. ERLICH WROTE TO DR. MULLIS. AND HERE DR. ERLICH IS TRYING TO SORT OUT WHO SHOULD BE GIVEN CREDIT FOR DISCOVERING WHAT AT CETUS. THERE SEEMS TO HAVE BEEN SOME DEBATE BETWEEN HIM AND DR. MULLIS ABOUT THAT.

BUT DR. ERLICH CONCLUDES THAT:

"IN FACT, THERE IS LITTLE REASON TO EXPECT THE PCR METHOD WOULD NOT WORK" -- AND HE EMPHASIZES "NOT" -- "WOULD NOT WORK ON A PLASMID."

WELL, THIS COMES BACK TO THE BREADTH OF THE CLAIMS. THE CLAIMS COVER THE USE OF PCR ON PLASMID.

BUT PLASMID IS A SIMPLER SYSTEM. IT IS NOT AS SIMPLE AS THE SYSTEMS THAT THE KHORANA LABORATORY WERE USING, BUT IT'S MUCH SIMPLER THAN THE -- THAN THE SYSTEMS THAT ARE WHAT WE NOW KNOW AS PCR TODAY.

DR. ERLICH WAS VERY ACCURATE IN HIS STATEMENT THAT THERE WAS NO REASON TO EXPECT THE METHOD WOULD NOT WORK ON A

PLASMID.

(PAUSE IN PROCEEDINGS)

MR. FIGG: DR. MULLIS HAS ALSO MADE SOME OUT-OF-COURT STATEMENTS THAT ARE VERY INSTRUCTIVE ON WHAT WE'VE BEEN TALKING ABOUT.

THIS IS THE ARTICLE THAT DR. MULLIS WROTE IN A JOURNAL CALLED CURRENT COMMUNICATIONS.

"POLYMERASE CHAIN REACTION: WHY IT WORKS."

VERY RELEVANT TITLE.

DR. MULLIS SAYS IN THIS PAPER:

". . . ADMIT IT'S DIFFICULT TO FIND SITUATIONS IN WHICH IT WILL NOT WORK."

THERE'S NO MENTION OF THE FOURTH DIMENSION IN THERE; THERE'S NO MENTION OF SOME CRITICAL TIME WINDOW THAT WE CAN'T QUITE FIGURE OUT WHAT THAT MEANS.

(PAUSE IN PROCEEDINGS)

MR. FIGG: THE LAST PAGE OF THIS ARTICLE PERHAPS HAS THE MOST CONSTRUCTIVE COMMENT.

DR. MULLIS CONCLUDES A LONG DISCUSSION ABOUT THE VARIOUS CONDITIONS THAT ONE LOOKS AT IN PCR, AND HE SAYS -- HE CONCLUDES THAT:

"THE FRAGMENTS MELT EASILY BELOW 95 DEGREES AND THE REACTIONS WORK FINE UNDER ANY REASONABLE CONDITIONS."

SO THESE CRITICAL CONDITIONS THAT CETUS KEEPS

EMPHASIZING, WHICH NO ONE COULD HAVE FIGURED OUT AND NO ONE COULD HAVE MADE THE KHORANA PRIOR ART WORK, ARE THE CONDITIONS PERHAPS THAT DR. MULLIS WAS TALKING ABOUT: ANY REASONABLE CONDITIONS.

THIS STATEMENT EXPLAINS WHY YOU DON'T FIND ANY CONDITIONS IN THE CLAIMS OF THE CETUS PATENTS: BECAUSE THEY DIDN'T CONSIDER THE CONDITIONS IMPORTANT. THEY KNEW THAT A PERSON SKILLED IN THE ART WOULD BE ABLE TO FIGURE OUT WHAT CONDITIONS TO USE TO MAKE THAT REACTION WORK.

(PAUSE IN PROCEEDINGS)

MR. FIGG: NOW, AGAIN, MR. PASAHOW HAS COME BACK AND HAS ATTEMPTED TO CAST FURTHER CONFUSION ON DR. MOLINEUX'S EXPERIMENT.

(PAUSE IN PROCEEDINGS)

MR. FIGG: AND HE APPARENTLY FINDS IT INCONCEIVABLE THAT DR. MOLINEUX GRAPHED ON THIS GRAPH WHAT HE SAID HE GRAPHED.

AND HE FINDS IT INCONCEIVABLE BECAUSE HE CAN'T CONCEIVE OF HOW THESE NUMBERS CAN REPRESENT A SCALE TO INDICATE THE DIFFERENCE RATHER THAN SOME READOUT THAT CAME OUT OF A GEIGER COUNTER.

YOU HEARD DR. MOLINEUX EXPLAIN THAT HE DILUTED THESE REACTIONS, SO THE SCALE CHANGES. YOU CAN'T KEEP THE SCALE THE CHANGE -- THE SAME WHEN YOU DO THAT.

AND YOU HEARD DR. DAHLBERG AGREE WITH THAT ON CROSS-EXAMINATION, AND YOU HEARD DR. DAHLBERG AGREE THAT THE

ALTERNATIVE WAY OF PLOTTING THIS WAS THE WAY THAT HE HAD SUGGESTED EARLIER IN HIS FIRST STEP -- TESTIMONY IN WHICH DR. MOLINEUX CAME BACK TO SHOW YOU ON THE BACK -- TO PLOT FOR YOU ON THE GRAPH.

THIS EXPERIMENT CLEARLY SHOWS NOT ONLY PCR; THIS EXPERIMENT SHOWS THAT, FOR THIS SYSTEM THAT DR. MOLINEUX WAS WORKING WITH, HE HAD WORKED OUT THE CONDITIONS WELL ENOUGH THAT HE WAS SEEING 100 PERCENT DOUBLING ON EACH CYCLE.

THIS IS WHAT CETUS CLAIMS TO BE THE KERNEL OF PCR, THE EXPONENTIAL AMPLIFICATION, AND IT'S SHOWN IN THIS GRAPH VIVIDLY.

(PAUSE IN PROCEEDINGS)

MR. FIGG: LADIES AND GENTLEMEN, YOU HAVE -- YOU HAVE HEARD FROM A LOT OF SCIENTIFIC EXPERTS. YOU PROBABLY NEVER THOUGHT YOU WOULD BE AS WELL-EDUCATED IN SOMETHING THIS . . . THIS HIGH-TECH AS YOU HAVE BEEN.

BUT WE HAVE HEARD FROM ONLY TWO PEOPLE WHO SAID THAT THEY HAVE PRACTICED PCR WITH THEIR OWN HANDS. DO YOU REMEMBER WHO THOSE PEOPLE ARE? THEY'RE DR. MULLIS, CERTAINLY, AND THEY'RE DR. IAN MOLINEUX.

DR. MOLINEUX PRACTICED PCR WITH HIS OWN HANDS IN 1971, 1972. DR. MULLIS REDISCOVERED THE TECHNIQUE IN 1983, AND HE HAS CERTAINLY DONE A LOT OF PCR WITH HIS OWN HANDS.

THE FIELD OF BIOTECHNOLOGY HAS CHANGED ENORMOUSLY OVER THAT DECADE. AS YOU'VE HEARD OVER AND OVER AGAIN, THESE PRIMERS THAT ARE SO ESSENTIAL TO MAKING THIS TECHNIQUE WORK WERE

EXTREMELY DIFFICULT TO GET BACK IN THOSE DAYS, BUT IN 1983, YOU CAN GET THEM OFF OF A MACHINE.

ANALYTICAL PROCEDURES WHICH WERE PRIMITIVE IN 1972 WERE MUCH MORE SENSITIVE IN 1983. THIS HIGHER SENSITIVITY ALLOWED SCIENTISTS TO USE MUCH SMALLER AMOUNTS OF DNA IN THEIR EXPERIMENTS IN 1983 AND 1984.

WE'VE ALREADY TALKED ABOUT THE FACT THAT DNA SEQUENCING BECAME A REALITY BY 1983, 1984. IT WAS NOT AVAILABLE TO THE SCIENTISTS IN THE KHORANA LAB.

NOTWITHSTANDING THESE OBSTACLES, THAT LABORATORY DISCOVERED THIS TECHNIQUE THAT HAS NOW BECOME KNOWN AS PCR.

DR. KHORANA AND HIS LABORATORY WERE TRULY AHEAD OF THEIR TIME. BUT THE FACT THAT HE WAS AHEAD OF HIS TIME SHOULD NOT ENTITLE CETUS TO APPROPRIATE FOR ITSELF THAT WHICH DR. KHORANA DISCOVERED AND DEDICATED TO THE PUBLIC.

YOU HEARD DR. MULLIS TESTIFY THAT THE CLAIMS OF THE '202 PATENT WOULD COVER THE AMPLIFICATION OF THE DNA DUPLEXES THAT DR. KLEPPE USED AND THAT DR. MOLINEUX USED.

IF THESE PATENTS STAND AND DR. KHORANA OR DR. MOLINEUX WERE TO REPEAT -- FOR COMMERCIAL PURPOSES, IF THEY WERE TO REPEAT TODAY THE WORK THAT WAS DONE IN THAT LABORATORY BACK IN 1972, THEY WOULD BE INFRINGING THE CETUS PATENTS.

THESE PATENTS SHOULD NOT STAND.

MR. PASAHOW SHOWED YOU A COPY OF THE VERDICT FORM ON THE TELEVISION SCREEN, AND I URGE YOU TO MARK "YES" UNDER THE

ANSWERS TO THE QUESTIONS ON VALIDITY IF YOU CONCLUDE THAT THOSE PATENTS ARE INVALID.

THANK YOU VERY MUCH, LADIES AND GENTLEMEN, FOR YOUR PATIENCE AND ATTENTIVENESS.

THE COURT: LADIES AND GENTLEMEN, WAS THIS THE DAY THAT YOU SAID YOU WERE GOING TO STAY UNTIL 2:00? OR THAT'S MONDAY.

(LAUGHTER)

THE COURT: OR SOME LATER HOUR? OR ARE YOU PLANNING TO LEAVE AT THE ORDINARY TIME AS HERETOFORE EXTENDED?

WERE YOU PLANNING TO LEAVE AT THIS TIME?

A JUROR: YES.

A JUROR: WE WERE GOING TO LEAVE ON TIME.

THE COURT: OKAY. THEN I THINK THE BEST THING TO DO IS, YOU WILL BE COMING BACK, AS YOU'VE AGREED UPON, AT 8:00 O'CLOCK ON MONDAY?

THE JURORS: (NODDING HEAD.)

THE COURT: OKAY. YOU WILL COME IN HERE AT 8:00 O'CLOCK.

I WILL GIVE YOU THE VERY FEW CONCLUDING INSTRUCTIONS -- THEY CONSIST OF ABOUT FIVE PAGES -- AND REVIEW THE VERDICT FORM WITH YOU. AND THE EXHIBITS WILL EITHER BE PLACED IN THE JURYROOM WITH YOU OR MADE AVAILABLE TO YOU, DEPENDING UPON THEIR SIZE OR -- AND SO FORTH.

NOW, ALSO, I UNDERSTAND THAT SOME OF YOU WOULD ACTUALLY LIKE TO HAVE COPIES OF THE INSTRUCTIONS TO TAKE HOME WITH YOU.

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I DON'T KNOW WHETHER THAT'S SORT OF OUT OF BAFFLEMENT AND SHOCK. I SUSPECT IT'S BECAUSE YOU'RE REALLY VERY CONSCIENTIOUS AND YOU WANT AN OPPORTUNITY TO STUDY THEM OVER.

SO WE HAVE YOUR OWN PERSONAL VOLUME HERE FOR YOU, BUT THERE ARE SOME INSTRUCTIONS THAT GO ALONG WITH IT:

YOU'RE CERTAINLY FREE TO READ THEM, REVIEW THEM, COMMIT THEM TO MEMORY, WHATEVER YOU WISH TO DO, BUT YOU MAY NOT DISCUSS THEM WITH ANYONE ELSE.

IF THERE HAPPENS TO BE A LAWYER WHO LIVES NEXT DOOR, YOU CAN'T GO NEXT DOOR AND TALK TO THE LAWYER AND ASK HIM OR HER WHAT THEY THINK OF THESE INSTRUCTIONS, OR IF THEY HAVE ANY PARTICULAR INTERPRETATION OR VIEW.

YOU CAN'T GO TO THE LAW LIBRARY, DO ANY RESEARCH.

YOU SHOULDN'T EVEN -- AND MUST NOT EVEN LOOK UP ANY OF THE WORDS IN THE DICTIONARY, WEBSTER'S OR ANYTHING MORE TECHNICAL THAN THAT AT ALL.

YOU'RE GOING TO HAVE TO JUST READ THEM OVER AND MAKE THE BEST OF THEM THAT YOU CAN, AND THAT MAY WELL BE HELPFUL TO YOU AS YOU EMBARK UPON YOUR DUTIES ON MONDAY.

IF YOU HAVE QUESTIONS ABOUT THE JURY INSTRUCTIONS, THE APPROPRIATE THING TO DO IS TO ADDRESS THOSE TO THE COURT WHEN YOU COME BACK AND -- IN THE COURSE OF YOUR DELIBERATIONS, AND THEN ALL OF YOU WILL HAVE THE BENEFIT OF THE COURT'S INSTRUCTIONS AFTER I'VE TAKEN IT UP WITH COUNSEL. THAT'S HOW YOU PROCEED.

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BUT PLEASE DO NOT DISCUSS THEM WITH ANYONE ELSE. THEY'RE FOR YOUR OWN PERSONAL USE. AND DON'T DO ANY INDEPENDENT RESEARCH OR INQUIRY OR CHECKING UP WORDS.

AND HAVE A VERY, VERY PLEASANT WEEKEND, AND WE'LL SEE YOU ON MONDAY AT 8:00 O'CLOCK. THANK YOU.

(JURY EXCUSED)

(OPEN COURT, JURY NOT PRESENT:)

THE COURT: ANYTHING FURTHER AT THIS TIME?

MR. PASAHOW: I JUST WANTED TO INQUIRE WHAT THE COURT'S PRACTICE IS ABOUT COUNSEL'S PRESENCE WHEN THE JURY'S DELIBERATING.

THE COURT: CAN YOU BE WITHIN . . .

(LAUGHTER)

MR. PASAHOW: THAT IS, DO WE HAVE TO --

THE COURT: YOU SHOULD BE CONFINED AS LONG AS THEY HAVE BEEN MAYBE.

MR. FIGG: WE DESERVE IT.

MR. PASAHOW: THAT'S WHAT I WAS AFRAID OF.

(LAUGHTER)

THE COURT: CAN YOU BE ACCESSIBLE WITHIN 15 MINUTES?

MR. FIGG: YES.

MR. PASAHOW: CERTAINLY. WELL --

MR. FIGG: WELL, 20.

MR. PASAHOW: -- WE HAVE OFFICES DOWNTOWN THAT MR. FIGG IS USING, THE PILLSBURY OFFICES DOWNTOWN, SO, SAFELY, IT WOULD

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BE ABOUT 20 MINUTES.

THE COURT: OKAY.

MR. PASAHOW: AND WE BOTH CAN CARRY PORTABLE PHONES, I GUESS, SO WE CAN BE READILY ACCESSIBLE.

MR. FIGG: YES.

THE COURT: YES. A LITTLE HIGH-TECH.

AND MAYBE -- AND, IN FACT, IF A QUESTION COMES UP, THEN WE CAN, I SUPPOSE, CALL YOU AND MAYBE EVEN HAVE A CONFERENCE CALL --

MR. FIGG: SURE.

THE COURT: -- IF THAT'S NECESSARY.

ORDINARILY, WHAT -- WHAT WE DO IS, WE GIVE THE JURORS A SHEET OF PAPER -- OR SHEETS, FORMS ACTUALLY -- IN WHICH THEY INDICATE WHAT THEIR QUESTIONS ARE.

SOME OF THEM ARE SO PRO FORMA THAT I JUST WRITE A NOTE BACK. FOR EXAMPLE, THE QUESTION, "MAY WE HAVE A DICTIONARY?" I DON'T ASK, "DO YOU PREFER WEBSTER'S OR BLACK'S?" I JUST WRITE, "NO, YOU MAY NOT HAVE IT." AND THAT WILL BE PRESERVED FOR THE RECORD, OR SOMETHING RATHER PERFUNCTORY LIKE THAT.

OBVIOUSLY IF IT GOES TO AN EXPLANATION OF AN INSTRUCTION, SOMETHING ELSE, THEN I WILL CONSULT WITH YOU BEFORE NOTIFYING YOU.

BUT ALL OF THE NOTES THAT THEY SEND OUT AND ANY ANSWERS THAT I GIVE THEM I PUT IN WRITING, UNLESS WE'VE DONE IT HERE IN OPEN COURT.

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SO I THINK THAT'LL BE ADEQUATE. AND THEY'LL ONLY BE HERE -- WE'LL ONLY NEED TO BE IN HERE FOR A FEW MINUTES AT THE VERY BEGINNING TO GIVE THEM THE CONCLUDING INSTRUCTIONS AND THE VERDICT FORM. OKAY?

MR. FIGG: DO YOU HAVE A PRACTICE ABOUT TALKING WITH THE JURORS AFTER THE VERDICT COMES BACK?

I WAS INVOLVED IN A CASE A YEAR OR SO AGO --

THE COURT: ONLY IF IT DOESN'T GENERATE ANY MOTIONS.

MR. FIGG: NO.

(LAUGHTER)

MR. FIGG: THAT WAS ABOUT WHAT I WAS GOING TO SAY.

I WAS INVOLVED IN A CASE A YEAR OR SO AGO WHERE THE JUDGE ALLOWED THE ATTORNEYS TO GO BACK, ACCOMPANIED BY THE JUDGE --

THE COURT: UH-HUH.

MR. FIGG: -- AND TO JUST GET SOME VERY BASIC FEELINGS FROM THE JURORS ON THE CONDITION THAT THEY WOULD NOT BE USED IN ANY MOTIONS OR ANYTHING LIKE THAT.

THE COURT: YES, RIGHT. RIGHT. RIGHT.

MR. FIGG: AND IT'S SORT OF AN INTERESTING FEEDBACK TO GET.

THE COURT: WELL, I CERTAINLY HAVE NO PROBLEM WITH YOU DISCUSSING, YOU KNOW -- AND I DISCUSS WITH THEM SOMETIMES, "IS THERE ANY WAY WE CAN MAKE THIS TRIAL, YOU KNOW, EASIER FOR YOU IN SOME WAY" --

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MR. FIGG: UH-HUH.

THE COURT: -- "OR MORE CONVENIENT FOR YOU," OR WHATEVER.

AND I'M -- I'M SURE IT'S HELPFUL TO FIND OUT THE SAME THING AS FAR AS YOU'RE CONCERNED.

MR. PASAHOW: (NODDING HEAD.)

THE COURT: AND WHAT ABOUT THE PRESENTATIONS OR WHATEVER.

MR. FIGG: (NODDING HEAD.)

THE COURT: THAT KIND OF THING IS FINE.

IN TERMS OF HOW THEY ARRIVE AT THEIR DECISION --

MR. FIGG: NO.

THE COURT: -- AND WHY, ET CETERA, NO.

MR. PASAHOW: (NODDING HEAD.)

THE COURT: BECAUSE I -- IT ONLY THEN STARTS A ROUND TWO OR THREE OR FOUR, WHATEVER IT MAY BE, AND I DON'T WANT TO DO THAT.

MR. FIGG: NO. I DIDN'T HAVE THAT IN MIND.

THE COURT: IF YOU DON'T LIKE THE VERDICT -- IF YOU DON'T LIKE THE VERDICT OR SOME -- SOMETHING THAT YOU THINK THE COURT DID THAT GAVE RISE TO THAT VERDICT --

MR. FIGG: TOO BAD.

THE COURT: -- THERE ARE LOTS OF PEOPLE UP THERE AT THE NINTH CIRCUIT.

(LAUGHTER)

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THE COURT: AND YOU CAN TALK TO THEM; OKAY?

MR. FIGG: OKAY.

THE COURT: FINE. WELL, HAVE A NICE WEEKEND, EVERYONE.

MR. PASAHOW: THANKS.

THE COURT: AND I GUESS IT WILL TAKE YOU AWHILE TO MOVE ALL THIS STUFF OUT OF HERE, BUT YOU'RE GOING TO HAVE TO WORK OUT WITH LURLINE WHAT GOES AND WHAT STAYS IN TERMS OF THE EXHIBITS.

SO WE'LL SEE YOU AT 8:00 O'CLOCK ON MONDAY.

MR. PASAHOW: THANK YOU, YOUR HONOR.

MR. FIGG: OKAY. THANK YOU, YOUR HONOR.

(COURT ADJOURNED AT 1:32 P.M. TO RECONVENE MONDAY, FEBRUARY 25, 1991, AT 8:00 O'CLOCK A.M.)