UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

SAN JOSE DIVISION

DISPLAYLINK CORPORATION,	)	CV-07-01998-RMW
PLAINTIFF,	)	SAN JOSE, CALIFORNIA
VS.	)	
	)	MAY 13, 2008
MAGIC CONTROL TECHNOLOGY,	)	
DEFENDANT.	)	PAGES 1-128

TRANSCRIPT OF PROCEEDINGS
BEFORE THE HONORABLE RONALD M. WHYTE
UNITED STATES DISTRICT JUDGE

A P P E A R A N C E S:

FOR THE PLAINTIFF: WILSON SONSINI GOODRICH ROSATI
DISPLAYLINK BY: JAMES YOON
STEFANI SHANBERG
MONICA MUCCHETTI ENO
650 PAGE MILL ROAD
PALO ALTO, CA 94304

FOR THE DEFENDANT: WANG, HARTMANN, GIBBS, CAULEY
MCT BY: RICHARD CAULEY
ERICK WOLF
FRANKLIN EUGENE GIBBS
1301 DOVE STREET, STE 1050
NEWPORT BEACH, CA 92660

ALSO PRESENT: ADRIAN VANDENHAVEN
ROBIN BREWER

OFFICIAL COURT REPORTER: SUMMER CLANTON, CSR,
CERTIFICATE NUMBER 13185

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DEFENDANT'S

DR. PAUL MIN
DIRECT EXAM BY MR. CAULEY P. 25
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SAN JOSE, CALIFORNIA MAY 13, 2008

P R O C E E D I N G S

(WHEREUPON, COURT CONVENED AND THE FOLLOWING PROCEEDINGS WERE HELD:)

THE CLERK: CALLING CASE C-07-01998. DISPLAYLINK VERSUS MCT, ON FOR CLAIMS CONSTRUCTION HEARING AND A FURTHER CMC.

STATE YOUR APPEARANCES, PLEASE.

MR. CAULEY: GOOD AFTERNOON, YOUR HONOR. RICHARD CAULEY, WANG, HARTMANN, GIBBS & CAULEY, APPEARING FOR MCT. AND WITH ME HERE ARE MY COLLEAGUES ERIC WOLF AND FRANKLIN EUGENE GIBBS.

I ALSO HAVE WITH ME MY EXPERT, PAUL MIN, WHO IS SITTING IN THE BACK.

MR. YOON: GOOD AFTERNOON, YOUR HONOR. JIM YOON WITH WILSON, SONSINI, GOODRICH & ROSATI. WITH ME TODAY IS MY PARTNER STEFANI SHANBERG AND MY COLLEAGUE MONICA MUCCHETTI ENO.

ALSO IN THE BACK IS ADRIAN VANDENHAVEN, WHO IS THE VICE PRESIDENT OF STRATEGIC ENGINEERING AT DISPLAYLINK, AND ALSO ROBIN BREWER.

THE COURT: OKAY. MY UNDERSTANDING, IF I RECALL CORRECTLY, IS THAT YOU WANTED SOME INITIAL TIME TO GIVE ME A TUTORIAL.

MR. YOON: YES, YOUR HONOR.

AS I UNDERSTAND, THE PROCEDURE TODAY IS THAT BOTH SIDES WILL PUT ON A 15-MINUTE TUTORIAL, THEN DR. MIN WILL TAKE THE STAND FOR TESTIMONY AND CROSS-EXAMINATION. AND THEN WE WOULD BEGIN ARGUING THE CLAIM TERMS IN THE ORDER OF THE ORDER.

THE COURT: ALL RIGHT.

WHO IS GOING TO GO FIRST ON THE TUTORIAL?

MR. CAULEY: YOUR HONOR, I THINK THE AGREEMENT WAS THAT WE WOULD.

THE COURT: OKAY. GO FOR IT.

MR. CAULEY: MY COLLEAGUE, MR. WOLF, WILL OPERATE THE EQUIPMENT. IS THAT -- IS HE GOING TO BE IN THE WITNESS BOX, YOUR HONOR?

THE COURT: IT'S PROBABLY EASIEST. ARE YOU GOING TO BE POINTING TO THINGS?

THE WITNESS: YES.

THE COURT: WHEN YOU NEED TO STEP DOWN TO POINT, FEEL FREE TO DO SO.

THE CLERK: LET ME SWEAR YOU IN FIRST. PLEASE RAISE YOUR RIGHT HAND.

(WHEREUPON, THE WITNESS WAS SWORN.)

THE WITNESS: I DO.

THE COURT: FOR THE RECORD STATE YOUR NAME AND SPELL YOUR FIRST AND LAST NAME.

THE WITNESS: MY NAME IS PAUL MIN.

P-A-U-L, AND LAST NAME MIN, M-I-N.

THE CLERK: THANK YOU.

THE WITNESS: GOOD AFTERNOON, YOUR HONOR.

THE COURT: GOOD AFTERNOON.

PAUL MIN,

BEING CALLED AS A EXPERT ON BEHALF OF THE DEFENDANT, HAVING BEEN FIRST DULY SWORN, TESTIFIED AS FOLLOWS:

THE WITNESS: YOUR HONOR, I WILL BE TALKING FOR THE NEXT 15 MINUTES, VERY HIGH LEVEL TUTORIAL BACKGROUND RELATED TO THE TECHNOLOGY.

ONCE AGAIN MY NAME IS PAUL MIN. I'M AN ASSOCIATE PROFESSOR AT THE WASHINGTON UNIVERSITY IN ST. LOUIS. I WORK THERE IN THE DEPARTMENT OF ELECTRICAL SYSTEMS ENGINEERING FOR THE PAST 18 YEARS.

HERE'S A QUICK OUTLINE. BASIC ITEMS THAT I'M GOING TO TALK ABOUT IS VIDEO GRAPHICS ARRAY IN THE CONTEXT OF A VIDEO DISPLAY DEVICES. AND UNIVERSAL SERIOUS BUS, IN THE CONTEXT OF MANY COMPUTER PERIPHERALS.

AND TO SET THE STAGES, I'M GOING TO SPEND THE FIRST FEW MINUTES TALKING ABOUT THE COMPUTERS

AND HOW COMPUTING WAS TAKING PLACE DURING THE TIME THAT THE VIDEO DISPLAY DEVICE AND VGA, ALONG WITH THE USB STANDARDS, WERE FORMING.

MOVING TO SLIDE THREE, JUST TO -- SO THAT I CAN POINT OUT DURING THE 1980S, THIS IS WHEN THE PERSONAL COMPUTING BEGAN. PRIOR TO THAT, OF COURSE, COMPUTERS WERE AVAILABLE BUT MORE IN THE CONTEXT OF MAIN FRAME SHARED COMPUTING, MUCH LIKE THOSE THAT I USED TO HAVE IN SCHOOL, THE TIMESHARING DEVICES. SO WE SEE TWO COMPUTERS, ONE FROM IBM IN 1981 AND THEN ANOTHER ONE FROM APPLE COMPUTERS, MACINTOSH, IN 1984.

MOVING TO THE NEXT SLIDE. AND JUST TO FOLLOW THROUGH AS A RESULT, PLAINTIFFS -- BECAUSE IN PART, THE INTERNET BECOMES QUITE POPULAR. AND DURING THE 1990'S, OF COURSE, THE WORLDWIDE WEB. IN SHORT, WWW. STARTED IN 1991.

THE PUBLIC INTERNET BEGAN AND THE TELECOMMUNICATION ACT IN 1996. AND THE REST IS, OF COURSE, HISTORY AS WE KNOW. THERE'S AN EXPLOSION OF USERS AND A DIFFERENT TYPE OF COMPUTERS. AND WIDE VARIETY OF COMPUTER PERIPHERALS THAT ARE CONNECTED TO COMPUTERS.

NOW, IN THE SAME TIME SCALE I'VE SHOWN HERE, THE VERY FIRST VGA SPECIFICATION, WHICH I

WILL USE THE ORIGINAL VGA TO DESCRIBE THAT, WAS SPECIFIED BY IBM IN 1987. AND A FEW YEARS LATER, THE VERY FIRST USB SPEC THAT'S IN USE, 1.0, WAS DEFINED IN 1995. AND USB WAS AT THAT TIME IN 1995, DEFINED BY INTEL.

MOVING TO NEXT SLIDE. SO HERE'S YOUR COMPUTER AND PERIPHERALS, LIKE THE WORDS SAY, WORK TOGETHER WITH THE COMPUTERS, AND THEY ARE CONNECTED. AND AS THE TIME GOES, YOU KNOW, JUST A NUMBER AND DIFFERENT TYPES OF THE PERIPHERALS EXPONENTIALLY MULTIPLIED INTO VERY LARGE NUMBERS.

MOVING INTO SEVEN. IN YEAR 2002 -- AND THIS, AS I UNDERSTAND, IS THE YEAR THAT THE PATENT WAS FILED -- APPLICATION FOR THAT WAS FILED. AMONG OTHERS, CERTAINLY THESE WERE VERY POPULAR TYPES OF PERIPHERALS.

VIDEO DISPLAY, WE CALL THEM MONITORS, AND OF COURSE THERE ARE KEYBOARDS, MOUSE AND PRINTERS, SPEAKERS AND MICROPHONES. THEY WERE VERY COMMONLY USED IN THAT TIME FRAME. AND THERE ARE SOME DIRECTIONS, THE VIDEO DISPLAY, FOR EXAMPLE, IS AN OUTPUT DEVICE FROM THE COMPUTER, THE KEYBOARD IS AN INPUT INTO THE COMPUTER, AND SO FORTH.

NOW, ONE THING I WOULD LIKE TO ASK YOU TO PAY ATTENTION TO IS THE DATA SPEED THAT IS INVOLVED

WITH THE VIDEO DISPLAY AS OPPOSED TO THE REST OF THE DEVICES, COMPUTER PERIPHERALS, THAT HAVE LOW TO SOMETIMES MEDIUM SPEED. BUT IN COMPARISON WITH VIDEO DISPLAY, IT IS SUBSTANTIALLY LOW IN DATA SPEED.

MOVING TO SLIDE A. SO WE LOOK AT THE VIDEO DISPLAY DEVICE IN A SEPARATE CONTEXT FROM THE REST OF THE PERIPHERALS. OF COURSE, THE VIDEO DISPLAY DEVICE DISPLAYS IMAGES, VIDEO SPECS, SOMETHING THAT WE CAN VISUALIZE ON THE DISPLAY DEVICE. AND AS I HAVE JUST POINTED OUT IT INVOLVES A HIGH DATA SPEED AND WHICH RESULTED IN THE CONNECTION FROM THE COMPUTER TO THE VIDEO DISPLAY DEVICE IN A -- USING THE MULTIPLE CONDUCTORS WHICH WE'LL CALL A PARALLEL CONNECTION.

AS I HAVE ILLUSTRATED EARLY ON, IN 1987 JUST SHORTLY AFTER IBM INTRODUCED THE PS2 LINE OF PERSONAL COMPUTERS, IBM DEFINED THE VERY FIRST ORIGINAL VIDEO GRAPHICS ARRAY, VGA. AND THE IMPACT IN THE INDUSTRY WAS QUITE SIGNIFICANT.

BEFORE THE ORIGINAL VGA WAS SPECIFIED, OFTEN COMPUTERS WERE INCOMPATIBLE WITH VIDEO DISPLAY DEVICES FROM DIFFERENT MANUFACTURES. AND AFTER, AND PERHAPS SINCE THEN, THE VIDEO DISPLAY DEVICES AND COMPUTERS ARE MUCH MORE COMPATIBLE.

AND TODAY WE DON'T REALLY WORRY ABOUT NOT HAVING DISPLAY DEVICE THAT ARE INCOMPATIBLE WITH THE COMPUTERS THAT WE MIGHT BUY.

AND ONE IMPORTANT FACTOR THAT PERHAPS I WANT TO SPEND A MINUTE OR SO IS THE TERM CALLED RESOLUTION. RESOLUTION IS BASICALLY, IN A NUTSHELL, HOW MUCH OF A DETAIL CAN YOU SEE IN A PICTURE.

HERE WE HAVE A VERY NICE PICTURE OF AN ANIMAL SITTING DOWN. AND LOOKING AT SOME SMALL PORTION OF IT AND BELOW THAT PART, NOW WE SEE, OF COURSE, A STRUCTURED PATTERN THAT LOOK LIKE COMBINATION OF TILES. AND IN FACT, EACH OF THOSE TILE-SHAPED SQUARES IS WHAT WE CALL PIXEL. AND THE RESOLUTION IS BASICALLY DEFINED IN TERMS OF AN NUMBER OF HORIZONTAL PIXELS AND VERTICAL PIXELS ON DISPLAY SCREEN. THE MORE YOU HAVE THOSE, THE MORE DETAIL YOU SEE, PERHAPS THE HIGHER QUALITY THE VIEWERS WILL FEEL.

BUT THAT DOESN'T COME IN FREE, OF COURSE. THE MORE PIXELS THAT YOU PUT HERE, IT INVOLVES THE MORE AMOUNT OF DATA. AND ESPECIALLY IF YOU ARE DISPLAYING SOME MOVING PICTURES THAT NEEDS REFRESHING THE SCREEN AT A CERTAIN FIXED RATE, THEN OF COURSE THAT MUCH MORE THE DATA SPEED WOULD BE

NEEDED TO KEEP UP WITH THAT QUALITY OF VIDEO DISPLAY. SO THAT IS AN ISSUE THAT THE PEOPLE IN VIDEO DISPLAY CONCENTRATE ON.

SLIDE NUMBER TEN. NOW, THE REST OF THE PERIPHERALS, THE LIST OF THE POPULAR PERIPHERALS IN 2002, THIS DATA SPEED SUBSTANTIALLY LOWER THAN THE VIDEO DISPLAY. WE CAN IMAGINE THE MOUSE -- THE DATA COMMUNICATION BETWEEN THE COMPUTER TO THE COMPUTER MOUSE WOULD BE SOMETHING THAT IS VERY LOW. AND WE CAN MENTION, PERHAPS, THE SPEAKERS AND MICROPHONE MIGHT BE HIGHER, BUT NOT COMPARISON WITH A VIDEO DISPLAY WHERE A VERY SUBSTANTIAL AMOUNT OF DATA WOULD NEED TO BE EXCHANGED.

SLIDE 11, PLEASE. SO ALL OF THESE OTHER PERIPHERALS AVAILABLE IN THE YEAR 2002, THEY PERFORM VARIOUS INPUTS AND OUTPUT FUNCTIONS. AND COMPARED WITH THE VIDEO DISPLAY, THEY ARE SUBSTANTIALLY LOWER IN THEIR SPEED. SO INSTEAD OF HAVING MULTIPLE CONDUCTORS THAT WE TRY TO USE THE TERM PARALLEL CONNECTION BETWEEN THE COMPUTER AND PERIPHERAL, IT WOULD BE ADEQUATE TO ACTUALLY HAVE A SINGLE PAIR -- ONE PAIR OF CONDUCTORS TO COMMUNICATE BETWEEN COMPUTER AND THE PERIPHERALS WHICH YOU WILL CALL A SERIAL CONNECTION.

NOW, IN 1995, ONE OF THE INDUSTRY GIANTS,

INTEL, HAS CHAMPIONED A SPECIFICATION CALLED UNIVERSAL SERIOUS BUS, IN SHORT, USB. AND BEFORE USB, ONCE AGAIN, THERE WERE MANY CONNECTORS FOR DIFFERENT PERIPHERALS. BUT AFTER USB, MOST PERIPHERALS BEGAN ADOPTING THEM. SO THE USB AND VGA HAD A VERY SIMILAR IMPACT IN THE COMPUTER INDUSTRY AS A WHOLE.

SLIDE 12. THIS IS MY LAST SLIDE. JUST KIND OF PUTTING VGA AND USB IN A SAME SLIDE TOGETHER. SO HERE'S A BEGINNING. THE YEAR IS DIFFERENT, OF COURSE. THE ORIGINAL VGA WAS IN 1987, USB WAS IN 1995. BUT JUST PUTTING THEM IN THE COLUMN BEGINNING, THEY ARE BOTH DRIVEN BY ONE COMPANY WHO WILL MEASURE AND IS A SIGNIFICANT PLAYER. IBM BEING THE VGA CHAMPION, AND THE INTEL BEING THE CHAMPION FOR USB.

SEVERAL YEARS GOING FORWARD IN 2002, OF COURSE, DURING THAT PERIOD, EACH THE VIDEO DISPLAY STANDARDS AND THE USB STANDARDS SPECIFIED FASTER AND MORE FLEXIBLE THE TECHNOLOGY. BUT AT THE SAME TIME, SOME DIFFERENT VERSIONS OR DIFFERENT VIDEO DISPLAY STANDARDS CAME ABOUT IN THE INDUSTRY AND SOME OF THE THEM ARE LISTED HERE. AND THE USB, THE SAME WAY. AND FOLLOWING VERSION 1.0, TO 1.1, TO 2.0.

IN 2002, THEY BOTH BECAME THE INDUSTRY STANDARD, AND THE LATER THE VIDEO DISPLAY STANDARD, SUCH AS SVGA AND XGA, CONTINUED TO USE THE SAME ORIGINAL CONNECTOR THAT WAS DEFINED BY THE IBM IN 1987, AND USB 2.0 WHICH WAS THE LATEST VERSION AT THE TIME IN 2002.

IN ADDITION TO USING THE ORIGINAL CONNECTORS, IT ALSO SPECIFIED TWO ADDITIONAL STANDARDS THAT ARE SMALLER VERSION, SO THAT AS THE COMPUTER PERIPHERAL DIVERSIFIED AND THEY BECAME SMALLER, THE CONNECTION COULD BE MADE INTO SMALLER DEVICES.

AND THAT IS THE END OF MY TUTORIAL. AND I WILL BE HAPPY TO ANSWER ANY QUESTIONS

THE COURT: OKAY. THANK YOU.

JUST OUT OF CURIOSITY, WHEN WAS THE APPLE 2 COMPARED TO THE IBM B-P150

THE WITNESS: THE APPLE MACINTOSH WAS 1984.

THE COURT: WASN'T THERE AN APPLE II BEFORE THE MACINTOSH?

THE WITNESS: NO, I DON'T KNOW THAT DATE. I'M SORRY. I CAN FIGURE IT OUT FOR YOU.

THE COURT: NO, THAT'S ALL RIGHT. I JUST REMEMBER FROM THE PERSONAL COMPUTER I HAD.

MS. SHANBERG: GOOD AFTERNOON, YOUR HONOR. I'M GOING TO BE PRESENTING DISPLAYLINK'S TUTORIAL.

BEFORE I GET STARTED I WANTED TO GO AHEAD AND HAND A COPY OF THE MARKMAN SLIDES AND THE TUTORIAL. DISPLAYLINK'S TUTORIAL PRESENTATION IS ACTUALLY QUITE COMPLIMENTARY TO WHAT YOU JUST HEARD FROM DR. MIN.

THE COURT HEARD ABOUT THE IMPORTANCE OF PERIPHERAL DEVICES TO THIS CASE. AND DISPLAYLINK AGREES THAT PERIPHERAL DEVICES, IN THE WAY THAT PERIPHERAL DEVICES ARE ATTACHED TO PERSONAL COMPUTERS, IS ONE IMPORTANT ASPECT OF THIS CASE.

DISPLAYLINK THINKS IT WOULD BE USEFUL FOR THE COURT TO GAIN AN UNDERSTANDING OF SOME OF THE TECHNICAL PROBLEMS THAT EXIST IN THE FIELD OF ART RELATING TO CONNECTING PERIPHERAL DEVICES TO COMPUTERS IN ORDER TO GAIN CONTEXT FOR THIS CASE.

SO IF YOU COULD TURN TO MY SLIDE TWO. AS LONG AS PERSONAL COMPUTERS HAVE EXISTED, SO HAVE PERIPHERAL DEVICES. AND, OF COURSE, WHEN WE TALK ABOUT PERIPHERAL DEVICES, WE ARE TALKING ABOUT THE DEVICES THAT ALLOW HUMAN USERS TO INTERACT WITH A PERSONAL COMPUTER. SO WE ARE TALKING ABOUT THINGS LIKE KEYBOARDS AND MONITORS, MODEMS AND PRINTERS.

AND, OF COURSE, WITH THESE PERIPHERAL DEVICES COMES THE NEED TO CONNECT THE DEVICES TO THE PERSONAL COMPUTER. AND FOR EACH DEVICE THAT YOU SEE IN THE MANY, MANY OTHER PERIPHERAL DEVICES THAT EXIST, THERE ARE SPECIFICATIONS IN THE INDUSTRY THAT EXPLAIN HOW THE CONNECTION IS TO BE EFFECTUATED AND HOW THE INTERACTION BETWEEN THE COMPUTER AND PERIPHERAL WILL BE ACCOMPLISHED.

MONITORS ARE THE MOST USED PERIPHERAL DEVICE HISTORICALLY AND TODAY. AND, OF COURSE, THIS IS THE PRIMARY WAY THAT A HUMAN BEING INTERACTS WITH THEIR PERSONAL COMPUTER.

EARLY ON, THERE WERE TWO PRIMARY VIDEO GRAPHICS STANDARDS. THERE WAS MDA WHICH WAS A MONOCHROME DISPLAY, AND CGA WHICH WAS THE FIRST COLOR GRAPHICS ADAPTER. EACH OF THESE EARLY STANDARDS WAS PRIMITIVE IN ITS FUNCTIONALITY AND ESPECIALLY IN THE RESOLUTION AND THE NUMBER OF COLORS IT DISPLAYED.

AND YOU CAN SEE, YOUR HONOR, WHEN WE TALK ABOUT MONITORS WE ARE NOT JUST TALKING ABOUT THE PERSONAL IBM MONITOR BUT ALSO MONITORS THAT ARE USED IN A HOST OF DIFFERENT APPLICATIONS SUCH AS AT THE AIRPORT, YOUR KIOSK TO CHECK IN, YOU KNOW, BY RADIOLOGISTS AT YOUR DOCTOR'S OFFICE OR OTHER USES

IN YOUR DOCTOR'S OFFICE, AIR TRAFFIC CONTROL MONITORS, AND EVEN THE DISPLAYS ON AN ATM MACHINE. SO MONITORS ARE UBIQUITOUS PERIPHERAL DEVICES.

IN 1987, AND DR. MIN TOUCHED ON THIS, IBM FOUND A MUCH IMPROVED DISPLAY INTERFACE CALLED VGA, AND THAT'S VIDEO GRAPHICS ARRAY. AND AS IS ALWAYS DONE IN THE INDUSTRY, WHEN A NEW AND IMPROVED STANDARD ARISES, IBM RECORDED THIS STANDARD COVERING THE VGA VIDEO GRAPHICS ADAPTER -- VIDEO GRAPHICS ARRAY GRAPHICS ARCHITECTURE, IN A SERIES OF TECHNICAL BULLETINS THAT WERE UPDATED, ACTUALLY, BACK IN 1981.

PRIOR TO VGA, VIDEO GRAPHICS ARRAY BY IBM, DISPLAY DEVICES WERE OFTEN MANUFACTURER SPECIFIC. AND WITH VGA THERE AROSE AN INDUSTRY STANDARD, PC TO DISPLAY INTERFACE, THAT REMAINS THE SEMINAL TECHNOLOGY AMONG DISPLAY INTERFACES TODAY. IT REMAINS SUPPORTED BY PC'S TODAY. AND IT'S ACTUALLY USED ON MOST HANDHELD AND MOBILE DEVICES FOR SURFING THE INTERNET.

VGA ENABLED A HIGHER RESOLUTION, A GREATER PALETTE OF COLORS, AND AN ABILITY TO SIMULTANEOUSLY DISPLAY 256 COLORS; WHEREAS MGA, PRIOR TO VGA, ONLY ALLOWED ONE, AS IT'S NAME SUGGESTS, MONOCHROME, AND CGA ONLY ALLOWED FOR 16

COLORS.

GOING ON TO THE NEXT SLIDE. THERE ARE A NUMBER OF DIFFERENT VIDEO GRAPHICS STANDARDS. THE COMPUTER INDUSTRY IS RAPIDLY CHANGING, AND DIFFERENT GROUPS OF COMPUTER USERS HAVE DIFFERENT DEMANDS, AND FOR EACH OF THESE DEMANDS A STANDARD IS PROMULGATED IN RESPONSE.

THESE VIDEO GRAPHICS STANDARDS HAVE, AGAIN, THEIR OWN SPECIFICATIONS THAT ARE WRITTEN BY DIFFERENT COMPANIES IN INDUSTRY ORGANIZATIONS. THE DIFFERENCES AMONG THESE STANDARDS ARE VAST. THEY DIFFER IN TERMS OF RESOLUTION, BIT RATE, AND THE HARDWARE REQUIRED FOR THE DISPLAY.

VGA, WHICH YOU CAN SEE IN THE UPPER LEFT-HAND CORNER OF THIS GRAPH, REMAINS A FUNDAMENTAL TECHNOLOGY. SOME OF THESE TECHNOLOGIES CAME UP EARLIER THAN VGA, OTHERS CONTEMPORARY WITH VGA. MANY ARE NEWER, AND OF COURSE WE WILL SEE MORE AND MORE OF THESE ARISE FOR DIFFERENT APPLICATIONS IN THE FUTURE.

SO MOVING ON TO THE NEXT SLIDE. DISPLAYLINK THINKS THE USEFUL CONTEXT IN WHICH TO ADDRESS THE FIELD OF THIS CASE IS TO TALK ABOUT SOME PROBLEMS THAT HAVE EVOLVED WITH REGARD TO CONNECTING PERIPHERAL DEVICES TO COMPUTERS.

COMPUTERS HAVE ALWAYS BEEN FRAUGHT FROM EXPANDABILITY PROBLEMS, AND USERS' NEEDS JUST BECOME MORE AND MORE SOPHISTICATED AND MORE AND MORE DEMANDING AS TIME GOES ON.

SO A PC USER DESIRES TO CONNECT AS MANY PERIPHERALS TO THEIR COMPUTER AS THEY CAN USING AS FEW PORTS AS POSSIBLE. SO THE PROBLEMS CAN BE SUMMARIZED AS FOLLOWS: THERE'S THE PORT PLUG PROBLEM, WHICH WE'LL ILLUSTRATE IN THE A MINUTE, AND IT SIMPLY ADDRESSES THE FACT THAT, EARLY ON, THERE WAS AN INDIVIDUAL PORT REQUIRED FOR EVERY SINGLE PERIPHERAL DEVICE IN AN INDIVIDUAL PLUG THAT WAS UNIQUE TO THAT PORT FOR PLUGGING IN WHICH LEAD TO, OF COURSE, EXPANDABILITY PROBLEMS.

AND THEN THE NEED FOR CONVERTERS. UPON THE MOVE TO A UNIVERSAL PORT, PEOPLE WANTED TO CONTINUE USING THEIR OLD LEGACY DEVICES, SO CONVERTERS WERE NECESSARY. AND NOWADAYS, ONE OF THE BIGGER PROBLEMS FACING THIS FIELD OF TECHNOLOGY IS THE DESIRE TO ATTACH MULTIPLE PERIPHERALS THROUGH A SINGLE UNIVERSAL PORT.

SO MOVING ON, WE ARE GOING TO GET INTO MORE DETAIL ABOUT THE PORT PLUG PROBLEM. WHAT YOU CAN SEE HERE IS THE BACK PLANE OF A TYPICAL PC BEFORE PC'S MOVED TO UNIVERSAL PERIPHERAL

INTERFACES. AND AS YOU CAN SEE THERE ARE A LIMITED NUMBER OF PORTS. AND EACH PORT IS UNIQUE TO A PARTICULAR PERIPHERAL DEVICE. SO YOU HAVE YOUR KEYBOARD AND YOUR MONITOR, AND YOUR PARALLEL PORT FOR YOUR PRINTER OR MODEM. AND THIS IS PROBLEMATIC BECAUSE THERE WAS A LIMITED SPACE AND LIMITED ABILITY TO ADD PERIPHERAL DEVICES TO PC'S.

SO IF YOU TURN TO THE NEXT SLIDE, YOU WILL SEE AN ILLUSTRATION OF HOW THIS IS PROBLEMATIC WITH REGARD TO THE PORT PLUG PROBLEM AND THE LIMITED NUMBER OF SPACES ON THE BACK OF A PC. IT CAN LEAD TO ALL KINDS OF WIRING PROBLEMS BECAUSE THERE'S A LOT OF DIFFERENT WIRES REQUIRED, EACH ONE HAS TO GO IN A PARTICULAR PORT. EACH ONE HAS A DIFFERENT SIZE, A DIFFERENT RIGIDITY, AND IT HAS TO CORRESPOND TO A PERIPHERAL DEVICE SITTING IN A PARTICULAR PLACE ON YOUR DESK.

SO THE UNIFORM PORT PLUG FOR EACH PERIPHERAL CAUSED ALL KINDS OF INEFFICIENCIES AND EXPANDABILITY PROBLEMS WITH THE PC.

NOW, THE ANSWER TO THIS PROBLEM WAS THE UNIVERSAL SERIAL BUS STANDARD. SO FACED WITH THESE DIFFICULTIES, THE INDUSTRY CAME UP WITH THE UNIVERSAL SERIAL BUS STANDARD. IT WAS A SIGNIFICANT STEP TO RESOLVING THIS PORT PLUG

PROBLEM.

AND USB 1.0 WAS INTRODUCED IN 1995. IT WAS WRITTEN BY THE USB IMPLEMENTER'S FORUM AND PUBLISHED BY A STANDARD THAT CAN BE USED BY ANY ENGINEERS THAT WANT TO INCORPORATE USB TECHNOLOGY INTO THE TECHNOLOGY THEY'RE DEALING WITH.

THE SECOND VERSION OF USB WAS USB 1.1. THAT CAME UP IN SEPTEMBER OF 1998, PRIMARILY TO SOLVE CERTAIN PROBLEMS THAT EXISTED WITH USB 1.0. AND FINALLY USB 2.0 WAS INTRODUCED IN APRIL OF 2000, AND THAT REMAINS THE LATEST VERSION OF USB STANDARD THAT EXISTS TODAY.

SO GOING ON TO THE NEXT SLIDE. THIS IS SOMETHING DR. MIN TOUCHED ON IN HIS TUTORIAL WAS THAT USB 1.0 AND 1.1 WERE NOT FAST ENOUGH TO HANDLE THE FAST DATA RATES THAT ARE REQUIRED BY DISPLAY DEVICES AND MONITORS.

SO USB 1.0 AND 1.1 WENT PART OF THE WAY TOWARDS SOLVING THE PORT PLUG PROBLEM BECAUSE NOW CAN PLUG IN YOUR KEYBOARD, MOUSE, MODEM, YOUR PRINTER AND CERTAIN OTHER PERIPHERAL DEVICES TO THE USB PLUG. BUT YOU COULDN'T PLUG YOUR MONITOR INTO THE USB PLUG UNTIL USB 2.0.

AND WITH USB 2.0, YOU HAD THE FIRST UNIVERSAL STANDARD WITH SUFFICIENT SPEED TO HANDLE

VIDEO DISPLAY. AND USB 2.0 WAS STILL ONLY FAST ENOUGH TO HANDLE THE ORIGINAL IBM VGA WITHOUT ANY KIND OF COMPRESSION OR FRAME BUFFERING. IT'S NOT FAST ENOUGH TO HANDLE THE MORE ADVANCED VIDEO GRAPHICS DISPLAYS -- STANDARDS -- THAT WE TALKED ABOUT EARLIER. BUT WITH USB 2.0, USERS DO NOW HAVE THE ABILITY TO CONNECT ALL OF THEIR PERIPHERALS TO THEIR PC USING A STANDARD INTERFACE.

LET'S GO INTO THE NEXT SLIDE. SO THIS LED TO THE NEED FOR CONVERTERS BECAUSE USERS STILL WANTED TO USE THEIR LEGACY PERIPHERAL DEVICES WITH THIS NEW PLUG INTERFACE. AND, OF COURSE, THE LEGACY PERIPHERAL DEVICES HAD THE OLD PLUG INTERFACE ATTACHED TO THEM.

SO EARLY ADOPTERS DIDN'T WANT TO THROW AWAY THEIR OLD PRINTER, THEIR OLD MODEM, OLD KEYBOARD OR OLD MONITOR, SO THEY NEEDED A CONVERTER TO CONVERT ONE TECHNOLOGY STANDARD TO ANOTHER. CONVERTERS ARISE EVERY TIME THERE IS A NEW TECHNOLOGY STANDARD, SO THAT THEY DIDN'T WASTE THEIR OLD PERIPHERAL DEVICES OR GO TO THE EXPENSE OF REPLACING THEM WITH BRAND NEW PERIPHERAL DEVICES EVERY TIME THE STANDARD CHANGED.

SO HERE IN THIS NEXT SLIDE YOU CAN SEE CONVERTERS. AND, OF COURSE, YOU KNOW, CONVERTERS

ARISE EVERY TIME STANDARDS IMPROVE. AND YOU'VE GOT HERE USB TO PCI CONVERTER, A PCI TO VGA CONVERTER FOR YOUR MONITOR, A USB TO SERIAL PORT CONVERTER FOR YOUR MODEM, A USB TO PARALLEL PORT FOR YOUR PRINTER, AND USB TO PS2 FOR YOUR MOUSE AND KEYBOARD.

IT'S WITH THIS CONVERTER PROBLEM, THE '788 PATENT FILED BY MCT IN DECEMBER 2002, PRIMARILY DEALS. AND YOU CAN SEE THE TITLE OF THE PATENT IS USB TO VGA CONVERTER. IT PROVIDES A WAY TO ATTACHING A MONITOR TO A USB PORT IN A COMPUTER. AND EACH INDEPENDENT CLAIM OF THE PATENT ALSO BEGINS WITH A PREAMBLE THAT DISCLOSES THIS USB TO VGA CONVERTER.

MOVING ALONG TO THE NEXT PROBLEM THAT AROSE AS THE NEEDS OF COMPUTER USERS BECAME MORE SOPHISTICATED, AND THAT'S THE DESIRE TO ATTACH MULTIPLE PERIPHERALS THROUGH A SINGLE PORT -- NOT THROUGH A UNIFORM PORT BUT THROUGH A SINGLE PORT.

AND YOU SWITCH TO THE NEXT SLIDE, HERE YOU CAN SEE THE SIDE OF A PERSONAL COMPUTER THAT HAS TWO USB SLOTS. AND THAT'S A COMMON NUMBER OF SLOTS TO HAVE ON THE SIDE OF A COMPUTER. BUT ON THE OTHER SIDE OF THE SCREEN YOU SEE THE PROBLEM.

THERE ARE FOUR PERIPHERAL DEVICES THAT A

COMPUTER USER MAY WANT TO ATTACH TO THIS COMPUTER AND, OF COURSE, THERE'S MANY OTHERS. THERE ARE CAMERAS, IPODS, THERE IS ALL KINDS OF PERIPHERAL DEVICES THAT A USER MAY WANT TO CONNECT.

SO WHAT YOU HAVE HERE IS SIMILAR TO THE TRADITIONAL PROBLEM OF UNIVERSAL INTERFACE -- THE NEED FOR A UNIVERSAL INTERFACE AND THE PORT PLUG PROBLEM MANIFESTING ITSELF WITH THE REGARD TO THIS USB PORT.

AND AS USERS WANT TO ATTACH MORE AND MORE PERIPHERALS THROUGH THEIR USB, THEY HAVE AN OPTION. IF YOU SEE THE NEXT SLIDE, THEY DID USE TWO USB CABLES, ONE FOR EACH MONITOR. BUT, OF COURSE, THAT'S EXTREMELY LIMITING BECAUSE YOU CAN ONLY ATTACH TWO USB PERIPHERAL DEVICES THROUGH THAT METHOD.

SO THEN AROSE THE USB HUB WHICH ALLOWS USERS TO CONNECT MULTIPLE PERIPHERAL DEVICES THROUGH A SINGLE PORT. BUT IT'S A COMPLICATED PROBLEM BECAUSE JUST LIKE DR. MIN EXPLAINED THAT THE USB INTERFACE ISN'T FAST ENOUGH TO HANDLE A LOT OF DIFFERENT DISPLAY DEVICES OR MONITORS, IT'S CERTAINLY NOT FAST ENOUGH TO HANDLE MULTIPLE PERIPHERAL DEVICES THROUGH ONE USB INTERFACE. SO IT REQUIRES THINGS LIKE FRAME BUFFERING AND

COMPRESSION IN ORDER TO GET THIS KIND OF EXPANDABILITY.

SO MOVING ON TO THE NEXT SLIDE. ONE EXAMPLE OF A TECHNOLOGY THAT'S TRYING RESPOND TO USERS' DESIRES TO CONNECT MULTIPLE PERIPHERALS, AND PARTICULARLY MULTIPLE DISPLAY DEVICES AND MULTIPLE MONITORS, TO THEIR PC IS THE TECHNOLOGY OF DISPLAYLINK. DISPLAYLINK FOCUSES ON THIS PROBLEM IN PROVIDING THE ABILITY TO CONNECT MULTIPLE MONITORS THROUGH A SINGLE PORT.

HERE YOU CAN SEE AN EXAMPLE OF FOUR MONITORS ATTACHED THROUGH A SINGLE USB CONNECTER. AND, OF COURSE, THIS USER ALSO HAS THEIR KEYBOARD AND MOUSE ATTACHED, PRESUMABLY, THROUGH THE USB.

THE PROBLEM OF CONNECTING MULTIPLE MONITORS IS AN ESPECIALLY DIFFICULT ONE AND IT'S AN ESPECIALLY IMPORTANT ONE. IT'S ESPECIALLY DIFFICULT BECAUSE THE BIT RATE REQUIRED FOR MONITORS IS JUST SO HIGH. AND ESPECIALLY IMPORTANT BECAUSE STUDIES ARE SHOWING THAT PRODUCTIVITY INCREASES SUBSTANTIALLY WITH THE ADDITION OF MULTIPLE MONITORS.

SO IF WE MOVE ON TO THE LAST SLIDE -- BILL -- WHAT YOU SEE HERE IS NEW TECHNOLOGY ALLOWING FOR PRESENTATION OF EXTREMELY HIGH

RESOLUTION STANDARDS THROUGH A SINGLE USB PORT.

THE PROBLEM HERE IS THE USB PORT CAN ONLY HANDLE A CERTAIN BIT RATE. SO THE FACT THAT A SINGLE USB PORT IS DRIVING ALL OF THESE VARIOUS DISPLAY DEVICES DEMONSTRATES THE INCREDIBLE ADVANCES IN THE FIELD OF TECHNOLOGY AND THE INNOVATIONS IN THIS TECHNICAL SPACE REQUIRED TO RUN THAT KIND OF BIT RATE THROUGH A SINGLE USB DEVICE.

SO WE HOPE THAT YOU KNOW THIS EXPLANATION OF THE EVOLVING PROBLEMS THAT EXIST IN THE FIELD OF ATTACHING PERIPHERAL DEVICES TO PERSONAL COMPUTERS PROVIDES A USEFUL CONTEXT FOR THE COURT AS IT HEARS THE REST OF THE MARKMAN HEARING.

THANK YOU.

THE COURT: YOU MAY PROCEED.

MR. CAULEY: YOUR HONOR, WE WOULD LIKE TO CALL DR. PAUL MIN TO THE STAND.

THE COURT: ALL RIGHT.

MR. CAULEY: DR. MIN IS ALREADY SWORN.

PAUL MIN,

BEING CALLED AS A EXPERT ON BEHALF OF THE DEFENDANT, HAVING BEEN PREVIOUSLY SWORN, WAS EXAMINED AND TESTIFIED AS FOLLOWS:

DIRECT EXAMINATION BY MR. CAULEY

BY MR. CAULEY:

Q. DR. MIN, I KNOW YOU ALREADY GAVE YOUR BACKGROUND AND EDUCATION IN THE TUTORIAL BUT WHY DON'T YOU GIVE IT AGAIN. WHY DON'T YOU JUST BRIEFLY DESCRIBE YOUR EDUCATIONAL BACKGROUND?

A. YOUR HONOR, I RECEIVED A BS IN ELECTRICAL ENGINEERING IN 1982. I GOT MY MASTER'S OF SCIENCE IN ELECTRICAL ENGINEERING IN 1984.

IN 1987, RECEIVED A PHD IN ELECTRICAL ENGINEERING FROM THE UNIVERSITY OF MICHIGAN. AND IN '87 UNTIL '90 I WAS AT BILTMORE, NOW THEY CALL THEMSELVES THE UNIVERSITY OF TECHNOLOGY.

AND SINCE 1990, I CAME TO WASHINGTON UNIVERSITY IN ST. LOUIS, AND I HAVE BEEN A FACULTY MEMBER THERE FOR THE PAST 18 YEARS.

MR. CAULEY: I BELIEVE I AGREED WITH MR. YOON, OR AT LEAST WITH COUNSEL FOR DISPLAYLINK, THAT THEY WOULD NOT OBJECT TO DR. MIN GIVING EXPERT TESTIMONY HERE TODAY, AND DO NOT OBJECT TO HIS QUALIFICATIONS.

MR. YOON: THAT'S CORRECT, YOUR HONOR. WE RESERVE THE RIGHT TO CROSS-EXAMINE DR. MIN BUT WE DON'T OBJECT TO HIM TESTIFYING.

MR. CAULEY: THANK YOU, YOUR HONOR.

Q. DR. MIN ARE YOU FAMILIAR WITH THE TERM A PERSON OF ORDINARY SKILL IN THE ART?

A. YES.

Q. DO YOU HAVE AN OPINION AS TO WHAT THE EDUCATIONAL BACKGROUND OF A PERSON OF ORDINARY SKILL IN THE ART, IN THE OF THE '788 PATENT IN 2002?

A. YES.

Q. WHAT'S YOUR OPINION?

A. IT IS MY OPINION THAT A PERSON SKILLED IN THE ART WOULD HAVE HAD, IN 2002, A MINIMUM OF BACHELORS OF SCIENCE DEGREE IN ELECTRONIC ENGINEERING, COMPUTER SCIENCE OR COMPUTER ENGINEERING, AND ONE YEAR OF EXPERIENCE IN ELECTRONIC INDUSTRY.

Q. WHAT TYPE OF TEST WOULD A PERSON OF ORDINARY SKILL IN THE ART BE SKILLED IN?

A. AGAIN, IT'S MY OPINION THAT SUCH A PERSON WOULD HAVE DESIGNING DIGITAL ELECTRONIC CIRCUITS THAT INVOLVES TIMING AND CONTROL SIGNALS, AND SOME EXPERIENCE IN PROGRAMMING MICROPROCESSORS AND SO FORTH.

Q. DR. MIN, DISPLAYLINK'S EXPERT, DR. JONES, DOES NOT INCLUDE COMPUTER ENGINEERING AS ONE OF THE AREAS OF FORMAL EDUCATION THAT HE WOULD INCLUDE AS

A PERSON OF ORDINARY SKILL IN THE ART. DO YOU VIEW THAT AS A SIGNIFICANT DISTINCTION?

A. YES, I BELIEVE SO.

Q. AND WHY IS THAT?

A. THE GENERAL AREA OF THE '788 PATENT IS IN COMPUTER PERIPHERALS. AND COMPUTER ENGINEERS ARE TRAINED TO DEAL WITH COMPUTER ARCHITECTURES AND DEVICES THAT SURROUND THE PROCESSORS AND SO FORTH.

SO IT IS MY OPINION THAT COMPUTER ENGINEERS WOULD HAVE BEEN AMPLY TRAINED TO APPRECIATE '788 PATENT AND UNDERSTAND THE MERITS.

Q. DR. JONES ALSO SAID A PERSON OF ORDINARY SKILL IN THE ART ALWAYS NEEDS TO BE A DIGITAL SYSTEM ARCHITECT; DO YOU AGREE WITH THAT?

A. PERSONALLY, I'M NOT QUITE SURE WHAT THAT TERM EXACTLY MEANS, BUT BASED ON THE DESCRIPTION GIVEN BY DR. JONES, I BELIEVE SUCH A PERSON WOULD BE AT A SOMEWHAT SUPERVISORY LEVEL SUPERVISING SEVERAL ENGINEERS AND DIGITAL ELECTRONICS, AND PERHAPS EVEN INFLUENTIAL IN SETTING THE PRODUCT DIRECTIONS AND SO FORTH.

SO IT IS MY OPINION THAT WOULD NOT BE A NECESSARY QUALIFICATION TO BE A PERSON OF ORDINARY SKILL IN THE ART FOR THE '788 PATENT.

MR. CAULEY: THANK YOU, DR. MIN.

COULD YOU PUT UP SLIDE SIX. I'M GOING TO TALK ABOUT USB.

Q. MCT'S PROPOSED DEFINITION OF USB IS ANY SERIAL BUS SPECIFICATION WHICH SUPPORT USB-BASED DISPLAY SIGNALS FROM THE HOST COMPUTER AND WHICH ARE COMPATIBLE IN THE USB PORT/PLUG.

DO YOU AGREE WITH THAT CONSTRUCTION?

A. I DO.

Q. AND WHY IS THAT?

A. FIRST OF ALL, THE PATENT IS SUBSET. THE PATENT IS ABOUT THE INVENTION IN THE PATENT, IT'S ABOUT A GENERALLY RELATED TO THE USB TECHNOLOGY. AND THERE IS REALLY NOTHING THAT SAYS WHICH VERSION OR WHICH SPECIFIC THAT THE USB TO VGA CONVERTER WAS RELATED TO.

AND ALSO, THE PATENT ALSO SAYS THE INVENTION WOULD WORK WITH ANY OPERATING SYSTEM AND MANY COMPUTERS. SO JUST READING THE PATENT ITSELF, TO ME, IS QUITE CLEAR THAT USB -- THE TERM USB WAS USED PRETTY GENERICALLY.

Q. SO I THINK YOU SAID IN YOUR TUTORIAL THAT AS OF 2002, AND EVEN TODAY, THERE ARE THREE DIFFERENT VERSIONS OF USB; CORRECT?

A. THREE DIFFERENT VERSIONS THAT BECAME KNOWN TO PUBLIC AND USED. AND THEY ALL SHARED CERTAIN

COMMON CHARACTERISTICS SUCH AS THEIR CONNECTORS, AND THE NUMBER OF CONDUCTORS IN THE BUS, FOUR CONDUCTORS BEING EXACT, AND THE DATA ASSIGNMENT ON EACH OF THE CONDUCTORS. AND EACH VERSION, EACH SUCCEEDING VERSION, PROVIDED THE APPLICABLE COMPARABILITY.

IN OTHER WORDS, IF YOU HAD AN OLDER USB DEVICE WHEN THE NEXT VERSION CAME ABOUT, THAT OLDER VERSION TECHNOLOGY WOULD STILL WORK AND THE NEW VERSION WOULD ACCOMMODATE THE OLDER VERSION OF THE TECHNOLOGY. SO THERE'S A CONTINUITY, AND THE EVOLUTION -- THE EVOLVING TECHNOLOGY THAT STARTED FROM 1.0, TO 1.1, TO 2.0, AND TO A PERSON OF ORDINARY SKILL IN THE ART WOULD NOT BE CONFUSED THAT THERE WOULD NOT BE ANYTHING MORE THAT'S COMING OUT IN THE FUTURE.

Q. AND WOULD A PERSON OF ORDINARY SKILL IN THE ART IN 2002 HAVE BEEN AWARE THAT THERE HAD BEEN DIFFERENT VERSIONS OF USB RELEASED?

A. OF COURSE.

Q. AND WOULD THEY BE AWARE THAT THERE WAS AN EVOLVING STANDARD?

A. OF COURSE.

Q. NOW, I WANT YOU TO TAKE A LOOK AT THE PICTURE AT THE TOP.

THE COURT: LET ME ASK A QUESTION.

IF WE ARE AT VERSION 2.0 ON USB CURRENTLY, WHAT PRACTICAL DIFFERENCE DOES IT MAKE BETWEEN THESE TWO DEFINITIONS AS APPLIED TO THIS CASE?

MR. CAULEY: THE PRACTICAL DIFFERENCE IS WHETHER IT WOULD APPLY TO SUBSEQUENT VERSIONS OF USB AS THEY ARE RELEASED.

THE COURT: BUT AS OF NOW, IT WOULDN'T MAKE ANY DIFFERENCE?

MR. CAULEY: AS OF RIGHT TODAY, IT WOULDN'T MAKE ANY DIFFERENCE BECAUSE I DON'T BELIEVE THERE'S ANOTHER VERSION OF USB AFTER 2.0, BUT 3.0 IS COMING OUT. AND THERE MAY BE SUBSEQUENT VERSIONS DURING THE LIFE OF THE PATENT OF USB, SO THAT'S A REAL DISTINCTION.

Q. DR. MIN, COULD YOU LOOK AT PICTURE AT THE UPPER LEFT CORNER?

A. YES.

Q. AND LOOK AT THOSE SOCKETS?

A. YES.

Q. WHAT ARE THOSE SOCKETS CALLED?

A. USB SOCKET OR USB PORT.

Q. AND WOULD SOMEONE OF ORDINARY SKILL IN THE ART CALL THEM THAT IN 2002?

A. YES.
Q. OKAY. IF YOU COULD LOOK AT MIDDLE PICTURE, IN 2002, WHAT WOULD A PERSON OF ORDINARY SKILL IN THE ART WOULD HAVE CALLED THOSE?
A. USB PLUGS.
Q. AND I GUESS THERE'S A CABLE BEHIND THOSE, WHAT WOULD THEY HAVE CALLED THAT?
A. USB CABLES.
Q. AND SO IT'S YOUR OPINION THAT IN 2002, A PERSON OF ORDINARY SKILL IN THE ART WOULD HAVE USED THE TERM USB GENERICALLY TO REFER TO ALL VERSIONS?
A. YES.
Q. AND WHEN YOU SAY BACKWARDS COMPATIBILITY, WOULD A PERSON OF ORDINARY SKILL IN THE ART -- AND THAT MEANS THAT IF I HAVE A COMPUTER THAT ONE, I THINK AS COUNSEL NOTED, A LEGACY COMPUTER THAT WOULD ONLY PUT OUT DATA AT A USB 1.0 RATE, AND I HAD A USB 2.0 PLUG, IT WOULD STILL WORK?
A. IT WOULD STILL WORK.
MR. YOON: EXCUSE ME. OBJECTION, YOUR HONOR.
I KNOW WE ARE PRESSED FOR TIME, BUT THE QUESTIONS GETTING LONGER AND LONGER AND MORE LEADING.
MR. CAULEY: I'M FINISHED WITH USB.

Q. WELL, ACTUALLY, LET ME JUST ASK -- IF YOU COULD LOOK AT DISPLAYLINK'S DEFINITION.
A. YES.
Q. UNIVERSAL SERIOUS BUS, THE TECHNOLOGY DESCRIBED IN THE UNIVERSAL SERIAL BUS SPECIFICATION REVISION 2.0 AND IT'S PREDECESSOR REVISIONS; DO YOU AGREE WITH THAT?
A. I WOULD DISAGREE THAT.
Q. AND WHY?
A. BECAUSE TO A PERSON OF ORDINARY SKILL IN THE ART, READING THE PATENT AND CLAIMS, IT'S CLEAR THAT THERE'S NO LIMITATION TO A CERTAIN VERSION OF IT.

AND EVEN IN THE FUTURE, BASED ON THE PRECEDING -- THE VERSIONS OF USB AND HOW THEY MAINTAIN THE CONTINUITY AND BACKWARD COMPATIBILITY IN TERMS OF A SIMILAR FORMAT AND THE TYPE OF CONNECTORS, TO PERSON OF ORDINARY SKILL IN THE ART WOULD HAVE UNDERSTOOD THAT WHAT COMES LATER PROBABLY BETTER AND FASTER AND MORE FLEXIBLE, BUT STILL WOULD BE COMPATIBLE IN BACKWARD WAY AND WILL MAINTAIN CONTINUITY IN TERMS OF ALL CONNECTORS AND SIGNALS.

MR. CAULEY: WOULD YOU PUT UP SLIDE TEN.

THE COURT: HOW WOULD -- HOW WOULD SOMEBODY ORDINARILY SKILLED IN THE ART HAVE DEFINED

USB IN 1995?

THE WITNESS: IN 1995?

THE COURT: RIGHT.

THE WITNESS: THAT'S WHEN THEY FIRST CAME OUT.

THE COURT: RIGHT.

THE WITNESS: SO THAT WOULD BE CHAMPION BY INTEL. SO PERHAPS AT THAT TIME IT WAS NOT AS WELL KNOWN. IT WAS AN INDUSTRY GIANT SAYING THAT WE HAVE A SOLUTION TO ALL THOSE CONNECTOR PROBLEMS THAT AMONG ALL THESE DIFFERENT PERIPHERALS. STILL BASICALLY SUGGESTING THE USB 1.0 AS A SOLUTION. AND IT TOOK A FEW YEARS BEFORE EVERYBODY CAUGHT UP.

THE COURT: SO WHEN DID SOMEONE ORDINARILY SKILLED IN THE ART BEGIN REFERRING TO USB AS A GENERIC REFERENCE TO A TYPE OF BUS AS OPPOSED TO THE INVENTION BY -- OR INTEL'S PRODUCT?

THE WITNESS: SO ACTUALLY, AFTER IT WAS INTRODUCED, THE VERSION THAT BECAME MOST POPULAR AND USED WIDELY WAS 1.1.

AND AT THAT TIME THAT WAS REALLY THE ONLY VERSION THAT WAS USED. SO IN THAT REGARD, YOUR HONOR, I THINK EARLY ON WHEN PEOPLE SAY USB, THEY HAVE NO CONFUSION WHATSOEVER BECAUSE THERE WAS ALREADY ONE VERSION.

WHEN THE 2.0 CAME ABOUT, PEOPLE JUST CONTINUED TO USE THE TECHNOLOGY AS USB, NOTING THAT THE NEW VERSION OF COURSE IS A FASTER AND HAD MORE FEATURES. SO IT WAS PROBABLY SHORTLY AFTER THE 1.1 WAS RELEASED IN '98, '99, IN THAT TIME FRAME.

THE COURT: OKAY.

MR. CAULEY: SLIDE TEN.

Q. MCT'S DEFINITION OF VGA IS THAT VGA IS A NORMAL AND CUSTOMARY MEANING TO THE PERSON OF ORDINARILY SKILL IN THE ART. VGA GENERICALLY REFERS TO ALL VIDEO DISPLAY STANDARDS COMPATIBLE WITH ANY 15 PIN VGA PORT/PLUG.

DO YOU AGREE WITH THAT?

A. I DO.

Q. AND WHY?

A. ONCE AGAIN, THE PATENT ITSELF STATES VERY GENERALLY THAT THE INVENTION IS VERY GENERALLY RELATED TO THE VGA TECHNOLOGY. AND ALSO, IT'S STATED CLEARLY THAT THE INVENTION WOULD WORK WITH ANY OPERATING SYSTEM IN ANY COMPUTERS.

AND ONCE AGAIN, THE VGA BEING SUCH A WELL KNOWN TERM WITH SEVERAL DIFFERENT VARIATIONS OF IT IN THE INDUSTRY WIDELY USED, AND TO ME IT'S -- AND TO A PERSON OF ORDINARY SKILL IN THE ART, THE PERSON WOULD GO, NO, THAT VGA WOULD BE A GENERIC

TERM THAT IMPLIES MANY OF THESE DIFFERENT VARIATIONS.

THE COURT: WHAT DOES 15-PIN VGA PORT/PLUG -- WHAT DOES VGA MEAN IN THAT?

THE WITNESS: IT'S A VIDEO GRAPHICS ARRAY.

THE COURT: WHAT DOES THAT REFER TO?

THE WITNESS: THE VGA PORT?

THE COURT: NO, VGA.

THE WITNESS: YES.

THE COURT: COULD IT -- IT'S A VIDEO GRAPHICS ARRAY, BUT IS IT A PARTICULAR --

THE WITNESS: NO. THIS PORT IS USED FOR ALL VARIATIONS THAT DISPLAY ANALOG VIDEOS USING THE THREE COLOR SCHEME, THE RED, GREEN AND BLUE COMBINED.

THE COURT: IS THERE SOMETHING OTHER THAN A 15-PIN VGA PORT PLUG? IS THERE A 15-PIN SOMETHING ELSE PORT?

THE WITNESS: NO. THAT'S WHAT IT IS.

BY MR. CAULEY:

Q. OKAY. IN 2002, FOR CONSUMERS AND BUSINESSES IN THE COMPUTERS THAT THEY WOULD USE AND THE MONITORS THEY WOULD USE, WHAT VIDEO STANDARD WERE THEY USING?

A. IN 2002, IT'S MY OPINION THAT PERHAPS THE MOST POPULAR ONE WOULD HAVE BEEN THE XGA WHICH IS, AGAIN, DEFINED BY THE IBM AT A LATER YEAR. AND MAYBE SOME PEOPLE USE SVGA, AND THERE ARE OTHER VARIATIONS OF IT TOO.

Q. JUST TO FOLLOW UP WHAT HIS HONOR WAS MENTIONING UP IN THE PICTURES, THAT THE TOP, IN 2002, WHAT WOULD THAT SOCKET HAVE BEEN CALLED ON THE UPPER RIGHT?

A. VGA PORT.

Q. AND THAT WOULD HAVE HOOKED UP TO AN XVGA OR SVGA MONITOR?

A. THAT SAME PORT WOULD BE USED FOR ALL OF THE MONITORS THAT HAVE XGA OR SVGA OR EVEN A LATER VERSION OF DIFFERENT VIDEO STANDARD, THEY WOULD BE CONNECTED TO THE SAME PORT.

Q. A PERSON ORDINARILY SKILLED IN THE ART WOULD HAVE CALLED IT A VGA PORT OR SOCKET?

A. THEY WOULD HAVE CALLED IT A VGA PORT.

Q. IN THE UPPER LEFT-HAND CORNER, WHAT ARE THOSE?

A. THOSE ARE VGA CABLES. I'M NOT SEEING THE REST OF IT, BUT IT'S THE TWO ENDS OF THE CONNECTORS. CONNECTED IN BETWEEN, THAT IS NOT PROBABLY NOT SHOWN HERE, ARE THE CABLE. IT'S CALLED VGA CABLE.

Q. AND WOULD THOSE HAVE CONNECTED UP TO SVGA?

A. TO THE MONITOR TO THE SVGA CABLE? HAVING CAPABILITY? OF COURSE.

Q. OKAY.

THE COURT: WHAT WOULD HAVE TO CHANGE IN THAT SOCKET IN THE UPPER RIGHT THAT WOULD CAUSE YOU TO SAY IT'S NOT A VGA PORT?

THE WITNESS: UM, REALLY NOTHING. THE SAME SOCKET WOULD WORK -- I MEAN, OF COURSE, THE ELECTRONIC BEHIND MUST BE FAST ENOUGH TO DISPLAY THE HIGHER RESOLUTION VIDEO, SO THE COMPUTER ITSELF HAS TO BE BETTER.

BUT IN TERMS OF ALL THE CONNECTORS AND THE USEABLE SIGNALS FROM THOSE INDIVIDUAL PINS, THEY ARE THE SAME.

THE COURT: EXCUSE ME IF THIS IS A DUMB QUESTION, BUT LET'S SAY THERE ARE ONLY 14 PINS.

THE WITNESS: YES.

THE COURT: WOULD IT THEN BE A VGA PORT?

THE WITNESS: I WOULD SAY ONE OF THOSE SIGNIFICANT CHARACTERISTICS IS THAT PARTICULAR CONNECTOR PORT. SO I WOULD SAY THAT IT MIGHT NOT LOOK -- OR PERHAPS, ONE MIGHT NOT THINK THAT THEY ARE VGA PORT.

THE COURT: HOW ABOUT WITH 17 -- 16?

THE WITNESS: OF COURSE, I'M ANSWERING

YOU HYPOTHETICALLY.

ONCE AGAIN, THE 15-PIN WITH THE SPECIFICALLY ASSIGNED SIGNAL ASSIGNED TO EACH. SO FOR EXAMPLE, ONE OF THE PINS MIGHT BE THE STRENGTH OF THE RED. ANOTHER ONE MIGHT BE STRENGTH OF THE BLUE. SO IT'S A VERY SET STANDARD AS TO HOW TO USE THOSE PINS TO COMMUNICATE BETWEEN COMPUTER TO THE VIDEO DISPLAY. NOW, IF YOU START CHANGING THAT, I WOULD SAY THAT YOU HAVE LOST THE ORIGINAL CHARACTERISTICS OF VGA.

THE COURT: WHERE DO YOU FIND WHAT SIGNAL GOES INTO WHAT PIN?

THE WITNESS: IT IS SPECIFIED BY THE ORIGINAL IBM, THE MANUAL THAT DEFINES --

THE COURT: SO EVEN THE SPECIFICATION FOR THE VGA HAS THE SAME SIGNALS AND THE SAME NUMBER OF PINS AS THE SPECIFICATION FOR THE SVGA.

THE WITNESS: THE SAME SIGNAL, SAME NUMBER OF PINS, JUST A FASTER DISPLAY AND SAYING HOW MANY PIXELS YOU HAVE. THAT'S THE DIFFERENCE, BASICALLY.

THE COURT: SO, DO YOU AGREE WITH THE DEFINITION THAT SAID SOMETHING LIKE, VGA GENERICALLY REFERS TO A SOCKET THAT HAS 15 PINS THAT RECEIVE SPECIFIC SIGNALS AS IDENTIFIED IN THE

IBM SPECIFICATION?

THE WITNESS: UM, YOUR HONOR, IF YOU CLARIFY THAT THE SIGNAL BEING -- THE NATURE OF THE SIGNAL WITHOUT REALLY SAYING HOW FAST THE SIGNALS ARE, YES. I AGREE WITH THAT DEFINITION.

THE COURT: WHAT'S THE NATURE OF A SIGNAL?

THE WITNESS: MEANING WHICH PIN IS USED.

SO FOR EXAMPLE, ONE PIN MIGHT BE HOW STRONG THE RED SIGNAL MIGHT BE, AND HOW STRONG THE BLUE SIGNAL WOULD BE, AND HOW STRONG THE GREEN SIGNAL WOULD BE FOR EACH OF THE PIXELS.

THE DIFFERENCE, BASICALLY, BETWEEN THE DIFFERENT VIDEO DISPLAY STANDARDS IS HOW MANY PIXELS YOU HAVE. SO HOW FAST DOES THE SIGNALS HAVE TO CHANGE TO CORRESPOND WITH EACH DOT ON THE SCREEN? AND HOW MANY TIMES DO YOU HAVE TO SCAN ACROSS, GO DOWN FROM THE TOP TO THE BOTTOM? AND HOW MANY TIMES ARE GOING TO REFRESH THE SCREEN?

IT REALLY COMES DOWN TO THE SPEED AS OPPOSED TO THE NATURE OF SIGNALS.

THE COURT: SO THE NATURE OF THE SIGNAL REMAINS THE SAME?

THE WITNESS: YES.

THE COURT: AND THE NUMBER OF THE PINS

REMAINS THE SAME?

THE WITNESS: YES.

THE COURT: IT'S JUST A MATTER OF SPEED THAT CHANGES.

THE WITNESS: THAT'S THE PURPOSE OF CHANGE, YES.

BY MR. CAULEY:

Q. ONE MORE QUESTION, DR. MIN.

I WANTED TO REFER YOU TO THE PATENT, IT'S COLUMN THREE, LINES 54 TO 56. IT SAYS "THE OPERATION PROCESS DISCUSSED HEREIN IS BASED ON THE WINDOWS OPERATION SYSTEM RELEASED BY MICROSOFT COMPANY." ARE YOU FAMILIAR WITH THAT OPERATING SYSTEM?

A. OF COURSE.

Q. WHAT WAS THE MOST CURRENT VERSION OF WINDOWS THAT WAS OUT IN DECEMBER OF 2002?

A. IT WOULD BE WINDOWS XP, WHICH STILL, FOR MANY PEOPLE, IS THE CHOICE.

Q. NOW, WOULD WINDOWS XP DISPLAY USING THE ORIGINAL 1987 OR 1991 VGA SPECIFICATION?

A. NO. IF YOU GO TO WINDOWS XP CONTROL PANEL AND TRY TO CHOOSE THE 640X480, IT WOULD NOT LET YOU DO THAT.

MR. CAULEY: I HAVE NO FURTHER QUESTIONS,

YOUR HONOR.

THE COURT: OKAY.

MR. YOON?

MR. YOON: YES. THANK YOU, YOUR HONOR. IF I COULD APPROACH THE WITNESS FOR A MOMENT. I WANT TO HAND HIM A COPY OF THE BINDERS IN CASE HE WANTS TO LOOK AT THE ORIGINAL DOCUMENT.

THE COURT: SURE.

CROSS-EXAMINATION BY MR. YOON

BY MR. YOON:

Q. YOU WON'T BE ON LONG ENOUGH TO NEED A LOT OF WATER.

A. THANK YOU SO MUCH.

BILL, COULD I HAVE PARAGRAPH 23 OF DR. JONES' EXPERT DECLARATION REGARDING THE LEVEL OF ORDINARY SKILL IN THE ART.

Q. BEFORE I ASK YOU SOME QUESTIONS ABOUT YOUR OPINION, SIR, I WANTED TO CLARIFY ONE THING ABOUT THE UNDERSTANDING OF ORDINARY SKILL IN THE ART.

BOTH YOU AND DR. JONES AGREE THAT A PERSON OF ORDINARY SKILL IN THE ART COULD HAVE EITHER A DEGREE IN ELECTRICAL ENGINEERING OR A DEGREE IN COMPUTER SCIENCE; CORRECT?

A. THAT IS CORRECT.
Q. AND NEITHER YOU NOR DR. JONES HAS A DEGREE IN COMPUTER ENGINEERING AS REQUIRED?
A. THAT IS CORRECT AS WELL.
Q. IT'S AN "OR" INSTEAD OF AN "AND," RIGHT SIR?
A. YES.
Q. ADDITIONALLY, YOU DR. JONES BOTH AGREE THAT THERE WOULD BE EXPERIENCE IN HARDWARE DESIGN, INCLUDING WORK IN THE CONCEPTS OF TIMING, DATA, THROUGHPUT, AND HOW THE DEVICE WOULD NEED TO INTERACT WITH THE INTENDED SYSTEM; CORRECT?
A. THAT IS CORRECT AS WELL.
Q. AND YOU DON'T DISAGREE THAT THE PERSON OF ORDINARY SKILL IN THE ART WOULD HAVE SOME EXPERIENCE IMPLEMENTING DEVICES THAT COMPLY WITH WELL KNOWN STANDARDS SUCH AS USB OR VGA?
A. YES.
Q. OKAY. SO LET'S TALK ABOUT THE FIRST OPINION REGARDING USB OR UNIVERSAL SERIOUS BUS.
THE COURT: WHAT DIFFERENCE DOES IT MAKE AS TO WHICH, OR WHOSE, DEFINITION OF ORDINARY SKILL IN THE ART IS ADOPTED?
MR. YOON: WELL, I GUESS THERE'S A PRACTICAL ONE, YOUR HONOR, AND THEN THERE'S, I GUESS, AN ACADEMIC ONE. WE WILL START WITH THE

PRACTICAL ONE.

WITH REGARDS TO THE INFRINGEMENT IN THIS CASE, I DON'T THINK IT MAKES A DIFFERENCE AS TO ONE OR THE OTHER. THE ISSUE, I BELIEVE, IS THAT OUTSIDE OF THE SCOPE OF THE MERITS OF THIS CASE, MCT HAS A LICENSING PROGRAM THAT IT WANTS TO PUSH. AND IT WANTS TO CLAIM ANY TYPE OF CONVERTER TECHNOLOGY, AND THAT IT'S VERY FOCUSED ON GETTING A CONSTRUCTION BECAUSE THE ISSUE HERE IS THAT ON THE MCT CONSTRUCTION, IT'S ANY SERIAL BUS, IT'S NOT A VERSION OF THE UNIVERSAL SERIAL BUS SPEC. THEIR CONSTRUCTION IS ANY SERIAL BUS THAT SUPPORTS OR IS COMPATIBLE WITH THE --

THE COURT: WHAT DIFFERENCE DOES THE LEVEL OF ORDINARY SKILL IN THE ART MAKE TO WHETHER THAT'S CORRECT OR INCORRECT?

MR. YOON: ACTUALLY, I DON'T BELIEVE IT DOES, YOUR HONOR. I WAS NOT GOING TO HAVE THAT AS PART OF MY CROSS-EXAMINATION, BUT COUNSEL HAS EMPHASIZED SOMEHOW THAT THE ABSENCE OF COMPUTER ENGINEERING WAS SIGNIFICANT, SO I THOUGHT I WOULD AT LEAST POINT OUT THE LEVEL OF COMMONALTY. BUT I DON'T BELIEVE IT MAKES DIFFERENCE, WHATSOEVER.

THANK YOU, YOUR HONOR

Q. ON THE SCREEN IS THE COMPUTING CONSTRUCTIONS

OF USB, DR. MIN, DO YOU SEE THAT?
A. YES.
Q. NOW, YOU AGREED THAT THE TERM USB WAS A WELL KNOWN TERM TO INDIVIDUALS OF ORDINARY SKILL IN THE ART AS OF THE FILING OF THE '788 PATENT; CORRECT?
A. YES.
Q. AND YOU AGREE THAT USB IS DEFINED BY THE VARIOUS USB SPECIFICATIONS?
A. THAT IS CORRECT.
Q. OKAY. AND FOR EXAMPLE, ANY DEVICE THAT USES A USB PORT OR PLUG HAS TO CONFORM WITH THE USB SPECIFICATION?
A. THAT'S RIGHT.
Q. AND FOR EXAMPLE, IF SOMEONE WANTED TO DESIGN A SYSTEM THAT IMPLEMENTED USB, THEY WOULD TURN TO THE USB SPECIFICATION, IS THAT FAIR TO SAY?
A. I WOULD AGREE WITH YOU.
Q. OKAY. SO LET'S TALK ABOUT THE RELATIONSHIP BETWEEN USB AND DISPLAY SIGNALS FOR A MOMENT. YOU WOULD AGREE THAT A USB BASED DISPLAY SIGNAL IS A SIGNAL ENCODED ACCORDING TO THE USB SPECIFICATION; CORRECT?
MR. CAULEY: I'M GOING TO OBJECT. I THINK IT'S BEYOND THE SCOPE OF DIRECT.
THE COURT: OVERRULED. GO AHEAD.

THE WITNESS: UM, I MEAN, OF COURSE, WITHOUT REALLY GETTING INTO THE SPECIFIC WORDS, I AGREE WITH THAT CONCEPT, YES.

MR. YOON: OKAY. AND IF I COULD HAVE ON THE SCREEN, A COPY OF THE JOINT CLAIM CONSTRUCTION STATEMENT, AND IN PARTICULAR, THE DEFINITIONS OF USB CONTROLLER.

Q. AND DO YOU SEE THAT THE MCT CONSTRUCTION OF USB CONTROLLER IS: A DEVICE THAT COMMUNICATES WITH THE COMPUTER ACCORDING TO THE USB STANDARD.

DO YOU SEE THAT?

A. I DO.

Q. AND AT YOUR DEPOSITION, YOU TESTIFIED THAT THE USB STANDARD WOULD BE UNDERSTOOD BY A PERSON OF ORDINARY SKILL IN THE ART TO REFER TO THE LATEST AVAILABLE USB STANDARD SPECIFICATION; CORRECT?

A. I DON'T RECALL THAT STATEMENT, EXACTLY. CAN YOU POINT OUT --

Q. YES. SO YOU HAVE THE BINDER --

BILL, IF YOU COULD CALL UP DR. MIN'S JANUARY 2008 DEPOSITION TESTIMONY AT PAGE 108, LINE 16, TO PAGE 107, LINE FIVE -- 106, LINE 16, TO 107 LINE FIVE.

SO DR. MIN YOU COULD SEE THAT THE FIRST QUESTION WAS YOU WERE READ THE MCT CONSTRUCTION OF

USB CONTROLLER DEVICE THAT COMMUNICATES WITH THE COMPUTER ACCORDING TO THE USB STANDARD; DO YOU SEE THAT?

A. I DO.

Q. AND THEN YOUR QUESTION WAS ASKED:

"QUESTION: WHAT IS THE USB STANDARD THAT YOU REFERRED TO THERE?"

AND YOUR ANSWER WAS,

"ANSWER: OKAY.

SO THE PATENT WAS FILED IN 2002, THAT WAS THE APPLICATION DATE, SO TO FOLLOW THE STRICT GUIDELINE OF BEING THE YEAR BEFORE. SO IT WILL BE WHATEVER THE LATEST USB STANDARD THAT WAS AVAILABLE IN 2001. AND THAT WOULD BE WHAT, AT THAT TIME, A PERSON OF ORDINARY SKILL IN THE ART WOULD LOOK AT THAT. I MEAN, THAT'S REALLY WHAT IS MEANT BY USB STANDARD."

DO YOU SEE THAT?

A. YES, I DO.

Q. AND YOU STILL AGREE WITH THAT TESTIMONY; CORRECT?

A. SURE. I DO.

WHY DON'T WE TURN THAT OFF, BILL.

Q. SO, NOW GOING BACK TO SLIDE SEVEN, AND YOU WOULD AGREE, DR. MIN, THAT DISPLAYLINK'S

CONSTRUCTION OF USB INCLUDES ALL VERSIONS OF THE USB SPECIFICATION IN EXISTENCE AT THE TIME THE '788 PATENT WAS FILED; CORRECT?

A. IT DOES INCLUDE ALL OF IT AT THE TIME THE APPLICATION WAS FILED.

Q. AND IT INCLUDED LATEST VERSION WHICH IS THE VERSION 2.0?

A. THAT IS CORRECT AS WELL.

Q. AND DISPLAYLINK'S CONSTRUCTION OF USB DOES NOT LIMIT THE TERM USB TO ANY ONE PARTICULAR VERSION OF THE USB SPEC; CORRECT?

A. IT LIMITS TO WHAT IS AVAILABLE -- WHAT WAS AVAILABLE AT THE TIME THE PATENT WAS FILED.

Q. BUT INCLUDES ALL OF THEM THAT EXISTED AS OF THAT TIME?

A. AS OF THAT TIME, YES.

Q. NOW LET'S -- AS A TECHNICAL MATTER, LET'S TALK ABOUT THE FUTURE FOR A MOMENT. YOU AGREE THAT FUTURE STANDARDS COULD BE CALLED USB BUT COULD BE SOMETHING ENTIRELY DIFFERENT THAN VERSION 2.0; CORRECT?

A. IT IS ALL CALLED USB 3.0, AND WE KNOW THAT.

Q. BUT IN THE FUTURE, DO YOU AGREE THAT THE TECHNOLOGY COULD BE TOTALLY DIFFERENT THAN WAS EXISTING AT THE TIME OF THE FILING OF THIS PATENT?

A. AS I MENTIONED, IT IS POSSIBLE BUT UNLIKELY.
Q. OKAY. AND YOU ALSO AGREE THAT IT'S POSSIBLE THAT FUTURE VERSIONS OF THE USB SPECIFICATION COULD BE INCOMPATIBLE WITH THE '788 PATENT; CORRECT?
A. ONCE AGAIN, IT IS POSSIBLE BUT UNLIKELY.
MR. YOON: AND YOUR HONOR, JUST FOR A MOMENT -- YOU ASKED COUNSEL A QUESTION JUST ON THIS ONE AS TO WHY IT MATTERS, I GUESS.
SINCE IT MAKES NO DIFFERENCE FOR INFRINGEMENT OF THIS CASE, AND AS OF TODAY, REVISION 2.0 IS THE LATEST VERSION. SO IT DOESN'T MAKE ANY EFFECT IN THIS CASE.
I DO THINK THIS GOES TO THE LICENSING PROGRAM. I THINK THE COURT CAN'T DECIDE THINGS IN A VACUUM. THE ISSUES OF INFRINGEMENT WOULD BE BASED ON WHETHER OR NOT THE TECHNOLOGY WAS SUBSTANTIALLY THE SAME OR WAS SUBSTANTIALLY DIFFERENT.
WE CAN'T DO THAT IN SPECULATION. AND WHAT MCT IS SEEKING HERE IS A STATEMENT, IN A VACUUM, THAT ALL FUTURE VERSIONS WOULD AUTOMATICALLY BE COVERED BY THE PATENT. AND I THINK THAT'S WHERE THE DISPUTE LIES, BUT REALLY, YOUR HONOR, NOT IN THE MERITS OF THIS PARTICULAR CASE RIGHT NOW.

Q. SO LET'S TALK ABOUT VGA FOR A MOMENT.
A. OKAY.
Q. NOW, THE PATENT DESCRIBES A USB TO VGA CONVERTER; CORRECT?
A. YES.
Q. AND YOU'VE NEVER DESIGNED A USB TO VGA CONVERTER; IS THAT RIGHT?
A. I HAVE NOT DONE THAT.
Q. YOU AND NEVER SUPERVISED SOMEONE WHO DID THAT?
A. THAT IS CORRECT AS WELL.
Q. AND YOU NEVER WORKED FOR A COMPANY THAT DID IT?
A. THAT'S RIGHT.
Q. AND WITH RESPECT TO THE DISPLAY DEVICES OF THE '788 PATENT, YOU NEVER, FOR EXAMPLE, DESIGNED A VGA MONITOR?
A. I HAVE NOT DESIGNED A VGA MONITOR.
Q. OKAY. NOW, LET'S TALK ABOUT WHAT THE PATENT SAYS ABOUT VGA, DOCTOR.
A. OKAY.
NOW, IF I COULD HAVE AN EXCERPT FROM COLUMN 1, LINE 7 OF THE '788 PATENT ON THE SCREEN.
Q. I HAVE IT ON THE SCREEN BUT YOU ARE WELCOME TO CHECK IT AS WELL.
THE '788 PATENT STATES THAT VGA REFERS TO

THE VIDEO GRAPHICS ARRAY, THAT'S WHAT THE PATENT SAYS; CORRECT, SIR?

A. YES.

Q. AND ON THE SCREEN NOW -- COULD I HAVE SLIDE 15, BILL -- IS DISPLAYLINK'S CONSTRUCTION OF VGA. AND DO YOU SEE THAT? IT IS THE VIDEO GRAPHICS ARRAY AS DESCRIBED BY THE IBM TECHNICAL REFERENCES RELATING TO VGA?

A. THAT'S WHAT IT SAYS, YES.

Q. OKAY. NOW, YOU AGREE THAT THE VGA STANDARD, THE ONE DEFINED BY IBM AND DESCRIBED IN DISPLAYLINK'S CONSTRUCTION, IS RELEVANT TO THE '788 PATENT; CORRECT?

A. COULD YOU REPEAT THAT QUESTION? I DIDN'T CATCH IT.

Q. YOU AGREE THAT THE IBM VGA STANDARD IS RELEVANT TO THE '788 PATENT?

A. IT IS RELEVANT IN A VERY MINOR WAY.

Q. OKAY. AND I BELIEVE YOU REFERRED TO THAT VGA STANDARD AS THE ORIGINAL VGA?

A. THAT'S RIGHT.

Q. OKAY. AND YOU ALSO AGREE THAT, IN YOUR OPINION, IN 2001, WHICH YOU REFER TO AS THE STRICT ONE YEAR BEFORE DATE, VIRTUALLY ALL PERSONAL COMPUTERS SUPPORTED THE ORIGINAL VGA; CORRECT?

A. MOST OF THEM DID IT, YES.
Q. OKAY. AND EVEN TODAY, THE ORIGINAL IBM VGA STANDARD IS SUPPORTED BY MOST COMPUTERS AND DISPLAY DEVICES?
A. IT IS SUPPORTED AS A MEANS TO DISPLAY THE FLASH SCREEN WHEN YOU FIRST TURN ON THE COMPUTER FOR THE FIRST 10 SECONDS, AND THEN AFTER THAT IT'S NO LONGER RELEVANT.
Q. EVEN TODAY, THE ORIGINAL IBM VGA STANDARD IS SUPPORTED AND USED BY MOST COMPUTERS AND DISPLAY DEVICES; CORRECT?
A. THAT IS CORRECT.
Q. NOW, LET'S TALK ABOUT SUPER VIDEO GRAPHICS ARRAY OR SVGA. NOW, THE VGA SPECIFICATION WAS WRITTEN BY IBM; CORRECT?
A. THAT'S CORRECT.
Q. NOW, THE SUPER VGA SPECIFICATION WAS NOT WRITTEN BY IBM, WAS IT, SIR?
A. THEY WERE WRITTEN BY THE CLONE MAKERS AT THE TIME, THE IBM CLONE MAKER.
Q. THE SUPER VIDEO GRAPHICS ARRAY SPECIFICATION WAS NOT WRITTEN BY IBM; CORRECT?
A. THAT'S RIGHT.
Q. AND SVGA WAS AVAILABLE AT THE TIME THE '788 PATENT WAS FILED; CORRECT?

A. THAT IS CORRECT.
Q. THERE IS NO MENTION OF SUPER VGA GRAPHICS ARRAY ANYWHERE IN THE TEXT OF THE '788 PATENT; CORRECT?
A. THAT IS CORRECT.
Q. NOW, LET'S TALK ABOUT THE DIFFERENCES BETWEEN THE SUPER VIDEO GRAPHICS ARRAY TECHNOLOGY DEVELOPED BY COMPANIES OTHER THAN IBM AND THE VGA TECHNOLOGY DEVELOPED BY IBM.
A. OKAY.
Q. IF YOU PUT AN SVGA SIGNAL INTO A VGA MONITOR, THE MONITOR WOULD NOT BE ABLE TO DISPLAY THE SIGNAL CORRECTLY; CORRECT?
A. THAT IS RIGHT.
Q. SO EVEN THOUGH YOU HAD THE SAME PLUG, I TOOK AN SVGA SIGNAL AND I PLUGGED IT INTO THE VGA MONITOR, THE VGA MONITOR WOULD NOT DISPLACE THE SVGA SIGNAL CORRECTLY?
A. THAT IS CORRECT.
Q. OKAY. NOW, LET'S TALK ABOUT EXTENDED GRAPHICS ARRAY ALSO KNOWN AS XGA. NOW, XGA WAS A SPECIFICATION WRITTEN BY IBM; CORRECT?
A. THAT'S RIGHT.
Q. AND, IN FACT, XGA WAS A SPECIFICATION MADE IN RESPONSE TO THE SUPER VIDEO GRAPHICS ARRAY

SPECIFICATION WRITTEN BY THE CLONE MAKERS?

A. I WOULDN'T SAY IN RESPONSE, BUT IT WAS SUBSTANTIALLY BETTER THAN SVGA.

Q. BUT IBM, COMPETING WITH THESE CLONE MAKERS, CAME OUT WITH THE XGA STANDARD; CORRECT.

A. I DON'T KNOW IF IT WAS REALLY IN COMPETITION, BUT IBM DID COME UP WITH XGA.

Q. AND XGA, THOUGH, DID COME UP SUBSEQUENT TO SVGA?

A. THAT'S CORRECT.

Q. NOW, IBM WROTE THE VGA SPECIFICATION; CORRECT?

A. YES.

Q. AND IBM WROTE THE EXTENDED GRAPHICS ARRAY SPECIFICATION; CORRECT?

A. THAT'S RIGHT.

Q. IBM DIDN'T CALL THE EXTENDED GRAPHICS ARRAY SPECIFICATION VGA 2.0, DID IT?

A. THEY DID NOT.

Q. NOW, LET'S TALK ABOUT THE DIFFERENCES BETWEEN THE TWO TECHNOLOGIES XGA, WHICH WAS MADE BY IBM LATER IN TIME, AND VGA.

IF YOU PUT AN XGA SIGNAL INTO A VGA MONITOR, THAT WOULDN'T BE DISPLAYED CORRECTLY, WOULD IT, SIR?

A. IT WOULD NOT.

Q. AND XGA EXISTED AT THE TIME THE '788 PATENT WAS FILED AS WELL; CORRECT?
A. THAT'S RIGHT.
Q. AND NOW YOU SAID, I BELIEVE, DURING DIRECT, THAT THE MOST POPULAR FORMAT WAS SUPER VIDEO GRAPHICS ARRAY AT THE TIME THE '788 PATENT WAS FILED; CORRECT?
A. I THINK I SAID EITHER XGA OR SVGA, BUT THOSE TWO ARE VERY POPULAR.
Q. OKAY. THERE IS NO MENTION OF EXTENDED GRAPHIC ARRAY OR XVGA ANYWHERE IN THE TEXT OF THE '788 PATENT; CORRECT?
A. THAT'S RIGHT.
Q. AND HAD MCT WANTED TO, THEY COULD HAVE MENTIONED SVGA AND XGA IN THE SPECIFICATION OF THE PATENT; CORRECT?
A. THAT'S RIGHT. THERE ARE JUST TOO MANY DIFFERENT STANDARDS TO SPECIFY ONE AT A TIME. SO THAT'S WHY I BELIEVE IT'S VGA. THE TERM WAS USED GENERICALLY TO COLLECTIVELY INCLUDE ALL OF THOSE.
Q. BUT ALSO IN THE CLAIM DRAFTING THEY COULD HAVE USED VIDEO STANDARD, OR GENERICALLY, ALL VIDEO STANDARDS COMPATIBLE WITH THE PIN, 15 PINS. BUT INSTEAD, THEY CHOSE TO USE THE TERM VGA; CORRECT?
A. BUT THAT IS THE TERM THAT THEY USED, YES.

Q. NOW, LET'S TALK ABOUT USB 2.0 FOR A MOMENT.
A. OKAY.
Q. I THINK YOU MENTIONED IN YOUR TUTORIAL BUT I WILL ASK YOU HERE. USB 2.0 WAS THE FIRST VERSION OF THE USB SPECIFICATION THAT PROVIDED ENOUGH BIT RATE FOR ACCEPTED VIDEO; CORRECT?
A. YES.
Q. ALL RIGHT. NEITHER 1.0 OR 1.5 MEGABITS A SECOND, OR 1.1 AT 12 MEGABITS PER SECOND WERE FAST ENOUGH?
A. THAT'S RIGHT.
Q. NOW, I BELIEVE THAT USB 2.0 PROVIDED A BIT RATE OF 480 MEGABITS PER SECOND.
A. SOMETHING IN THERE, YES.
Q. NOW, LET'S TALK ABOUT EXTENDED GRAPHICS ARRAY OR XGA, ONE OF THE STANDARDS YOU SAY VGA COVERS.
A. YES.
Q. AS A TECHNICAL MATTER, A USB 2.0 CONNECTION WOULD NOT PROVIDE ENOUGH BIT RATE FOR AN XVGA VIDEO SIGNAL TO DISPLAY PROPERLY ON A MONITOR WITHOUT SOME TYPE OF COMPRESSION; CORRECT?
A. THAT IS CORRECT.
Q. THE '788 PATENT DOESN'T SAY ANYTHING ABOUT THE HOST COMPUTER USING COMPRESSION, DOES IT, SIR?
A. IT DOES NOT.

Q. WELL, LET'S SEE WHAT THE '788 PATENT ACTUALLY SAYS, THOUGH.

IF I COULD HAVE SLIDE 65 ON THE SCREEN. SO YOU ARE WELCOME TO LOOK AT THE PATENT.

Q. THE PATENT SAYS IN COLUMN 2, LINES 9 AND 10, THAT FIGURE 4 PROVIDES AN ILLUSTRATION OF HOW THE HOST COMPUTER ISSUES USB BASED DISPLAY SIGNALS TO A USB CONTROLLER; THAT'S WHAT IT SAYS, RIGHT, SIR?

A. IT DOES.

Q. AND IF COULD YOU COULD GO DOT NEXT SLIDE, WHICH IS SLIDE 66 IN THE MARKMAN PRESENTATION. THESE ARE THE STEPS THAT ARE DESCRIBED IN THE SPECIFICATION OF THE '788 PATENT.

MR. YOON: YOUR HONOR, THIS IS LOCATED ON THE COLUMN 3, LINES 52 TO 65.

Q. YOU ARE WELCOME TO LOOK ON THE SCREEN, DR. MIN, OR CHECK THE ACTUAL TEXT, OKAY?

A. OKAY.

Q. NOW, SO THIS IS WHAT THE EXAMPLE GIVEN IN THE '788 PATENT OF HOW THE HOST COMPUTER SYSTEM GENERATES THE USB DISPLAY SIGNAL; CORRECT?

A. YES.

Q. AND YOU WOULD AGREE THAT STEPS 400 TO 430 OCCURRED INSIDE THE HOST COMPUTER; CORRECT?

MR. CAULEY: YOUR HONOR, I AM GOING

OBJECT. THIS IS BEYOND THE SCOPE OF DIRECT.

THIS IS A TERM THAT DR. MIN WAS NOT PRESENTED ON DIRECT FOR.

MR. YOON: YOUR HONOR, THIS GOES TO THE HEART OF WHAT THEY WOULD UNDERSTAND VGA, AND I WILL TIE IT TOGETHER, YOUR HONOR.

THE COURT: I'LL ALLOW IT.

MR. YOON: OKAY.

Q. SO YOU AGREE THAT 400 TO 430 OCCURRED INSIDE THE HOST COMPUTER; CORRECT?

A. YES. I AGREE.

Q. OKAY. SO IN STEPS 420 AND 430, THE HOST COMPUTER'S GRAPHIC GRAPHIC ENGINE AND GRAPHIC DRIVER GENERATES THE IMAGES THAT WILL BE DISPLAYED TO THE DISPLAY DEVICE; CORRECT?

A. THAT'S RIGHT.

Q. AND IN STEP 440, THE GENERATED IMAGE IS TRANSMITTED TO THE DISPLAY DEVICE VIA THE USB INTERFACE; CORRECT?

A. THAT'S RIGHT.

Q. THERE'S NO DISCUSSION OF COMPRESSING THE GENERATED IMAGINE RESULTING FROM STEP 30 BEFORE IT'S TRANSMITTED VIA THE USB INTERFACE; CORRECT?

A. THAT'S RIGHT. THERE IS NO COMPRESSION ISSUE HERE.

Q. NOW, IF YOU GO TO SLIDE 56 OF THE MARKMAN PRESENTATION, THE '788 PATENT TALKS ABOUT DIRECTLY TRANSMITTING USB SIGNALS FROM THE HOST COMPUTER TO THE USB DISPLAY DEVICE. THAT'S IN COLUMN 1, LINES 41 TO 44; IS THAT RIGHT, SIR?

A. YES.

Q. NOW, SIR, A PERSON OF ORDINARY SKILL IN THE ART AT THE TIME THE '788 PATENT WAS FILED WOULD UNDERSTAND THAT USB 2.0 DID NOT HAVE THE BANDWIDTH SUFFICIENT TO DIRECTLY TRANSMIT THE XGA SIGNALS WITHOUT COMPRESSION; CORRECT?

A. THAT'S RIGHT.

Q. AND THIS PATENT IS ENTITLED USB TO VGA CONVERTER; CORRECT?

A. THAT IS CORRECT AS WELL.

Q. AND THIS PATENT DOES NOT TEACH HOW TO TRANSMIT AN XGA SIGNAL TO A MONITOR; CORRECT?

A. THAT IS CORRECT. I MEAN IT DOESN'T REALLY TALK ABOUT XGA SIGNAL BEING SPECIFICALLY PART OF THIS TRANSMISSION.

MR. YOON: COULD YOU TURN THAT OFF, BILL.

Q. LET'S TALK NOW ABOUT SUPER XGA KNOWN AS XGA, ULTRA XGA, AND THEN QUAD XGA, OKAY SIR?

A. YES.

Q. AND IF I COULD HAVE YOUR DECLARATION ON THE

SCREEN AT PAGE 8, THE MIDDLE PARAGRAPH.

NOW, IT'S YOUR OPINION, SIR, THAT THE TERM VGA COVERS NOT ONLY SVGA AND XGA, BUT SUPER XGA, ULTRA XGA AND QUAD XGA; DO YOU SEE THAT, SIR?

A. YES.

Q. AND ALSO IT COVERS THEIR COUNTERPARTS FOR WIDESCREEN DISPLAY DEVICES IF AVAILABLE?

A. YES.

Q. OKAY. NOW, THE BIT RATE DEMANDS FOR SUPER XGA, ULTRA XGA, AND QUAD XGA ARE MUCH HIGHER THAN THE BIT RATE DEMANDS OF XGA; CORRECT?

A. THAT'S RIGHT.

Q. SO CERTAINLY WITH USB 2.0 YOU COULDN'T TRANSMIT THOSE WITHOUT COMPRESSION EITHER?

A. COMPRESSION IN A SENSE THAT -- AS YOU KNOW, THE USB 2.0 HAS A FIXTURE OF THE BIT RATE. SO THE GRAPHICS ENGINE, WHATEVER THE AVAILABLE BIT RATE, WOULD HAVE TO MATCH THAT UPPER LIMIT, BUT IT DOESN'T REALLY TALK ABOUT COMPRESSION.

Q. SO LET'S TALK ABOUT. -- THERE'S NO MENTION OF SXGA IN THE '788 PATENT?

A. NO.

Q. AND OF COURSE THERE'S NO MENTION OF EITHER QXGA OR UXGA; CORRECT?

A. THAT IS CORRECT.

Q. NOW LET'S JUST TALK ABOUT -- THERE IS A LOT OF DISCUSSION ABOUT THIS 15-PIN PLUG AND HOW VGA IS RELATED TO THIS 15-PIN PLUG.

A. OKAY.

BILL, COULD I HAVE COLUMN 2, LINES 14 TO 16 ON THE SCREEN.

Q. NOW, COLUMN 2 IS ON THE '788 PATENT DESCRIBING FIGURE 6. AND THAT'S ONE EMBODIMENT OF THE USB TO VGA CONVERTER FOR CONNECTING A DISPLAY DEVICE TO A HOST COMPUTER; CORRECT?

A. YES.

NOW, IF I COULD ACTUALLY HAVE FIGURE 6 ON THE SCREEN.

Q. SO HERE'S FIGURE 6. YOU ARE FAMILIAR WITH THIS FIGURE, RIGHT DR. MIN?

A. YES.

Q. SO 200 WOULD BE THE HOST COMPUTER, CORRECT?

A. THAT'S RIGHT.

Q. WE COULD HIGHLIGHT THAT. 300 WOULD BE THE DISPLAY DEVICE?

A. YES.

Q. 100, SIR, WOULD BE THE USB TO VGA CONVERTER?

A. LET ME JUST DOUBLE CHECK THAT.

Q. ABSOLUTELY, SIR.

A. I THINK THAT'S RIGHT, YES.

Q. IT'S IN COLUMN 4 OF THE PATENT.
A. YES.
Q. NOW, IN THIS EXAMPLE OF THE CLAIMED USB TO VGA CONVERTER, NO VGA PLUG IS USED, IS THERE, SIR?
A. THERE IS NO VGA PLUG HERE.
Q. RIGHT. IN FACT, THEY HAVE A USB PLUG 510 AND ANOTHER USB PLUG 510; CORRECT?
A. YES.
Q. SO YOU COULD HAVE A USB TO VGA CONVERTER WITHOUT A VGA PLUG, RIGHT SIR?
A. IN THIS EMBODIMENT, THAT IS CORRECT, YES.
Q. AND THIS IS THE EMBODIMENT DISCLOSED IN PATENT, CORRECT?
A. YES.
Q. AND LASTLY, COULD I HAVE IN THE SCREEN, SLIDE 17, THAT SHOWS YOU CLAIM 1 AND CLAIM -- DEPENDENT CLAIM 3. YOU ARE FAMILIAR WITH THESE CLAIMS; CORRECT, DR. MIN?
A. YES.
Q. OKAY. AND IF YOU LOOK THE CLAIM 1, THE TERM "VGA PLUG" DOES NOT APPEAR ANYWHERE IN CLAIM 1 DOES IT, SIR?
A. IT DOES NOT.
Q. THE TERM VGA PLUG DOES APPEAR IN DEPENDENT CLAIM NUMBER 3, DOESN'T IT?

A. IT DOES.
Q. SO YOU CAN PRACTICE THE VGA OF CLAIM 1 WITHOUT USING A VGA PLUG; CORRECT?
A. I MEAN AS ONE OF THE EMBODIMENTS SHOWS, THAT'S THE CASE.
Q. SO VGA DOES NOT NECESSARILY MEAN VGA PLUG, DOES IT, SIR?
A. IT DOES NOT. VGA AND VGA PLUG IS NOT ONE AND THE SAME, NO.
Q. THANK YOU SIR.
MR. YOON: NO FURTHER QUESTIONS.
THE COURT: ANYTHING FURTHER?
MR. CAULEY: I HAVE NO QUESTIONS, YOUR HONOR.
THE COURT: IF -- HOW DO YOU DISTINGUISH A NON-VGA PORT PLUG FROM A VGA PORT PLUG? HOW WOULD YOU --
THE WITNESS: I MEAN, JUST LOOKING AT THE SHAPE OF THE CONNECTORS, YOU MEAN?
THE COURT: IF I ASKED YOU, "TELL ME THE DIFFERENCE," HOW WOULD YOU DESCRIBE IT?
THE WITNESS: THE VGA, FIRST OF ALL -- FIRST OF ALL, IT HAS FIVE PINS THAT ARE STAGGERED IN THREE ROWS, EACH HAVING FIVE PINS. SO MULTIPLIED BY 3 BECOMES 15, AND HAS THE WELL KNOWN

CONNECTOR SHAPE.

AND MORE THAN THAT, YOUR HONOR, IS THE WAY THE SIGNALS ARE USED. THE SIGNALS ARE DEFINED FOR EACH OF THOSE PINS. WHAT THOSE SIGNALS THROUGH THOSE PINS ARE FOR.

THE COURT: AND I FIND THAT THE DEFINITION OF WHAT THOSE PINS ARE FOR WHERE?

THE WITNESS: IT START BACK FROM 1987. IT'S THE SAME STANDARD USED THROUGHOUT.

THE COURT: OKAY. THANK YOU.

MR. YOON: YOUR HONOR, WOULD YOU LIKE TO TAKE YOUR BREAK NOW AND THEN WE CAN COME BACK AND BEGIN ARGUMENT, OR WOULD YOU LIKE TO GET INTO THE SOME OF THE TERMS?

THE COURT: WHY DON'T WE TAKE A BREAK AND COME BACK AND GO THROUGH THE TERMS.

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

(WHEREUPON A RECESS WAS TAKEN.)

MR. YOON: EXCUSE ME, YOUR HONOR. JUST IN THE TERMS OF TIME MANAGEMENT BECAUSE WE HAVE TEN TERMS WE ARE DISPUTING, IS THERE A SPECIFIC TIME THE COURT WANTS THE HEARING TO END? PROBABLY SOONER RATHER THAN LATER SO WE CAN MANAGE OUR TIME.

THE COURT: YOU HAVE PROBABLY AN HOUR.

MR. YOON: OKAY. UNDERSTOOD, YOUR HONOR.

MR. CAULEY: SO I THINK WHAT WE ARE GOING TO DO IS WE ARE GOING TO DO ONE TERM AT A TIME AND THEN ARGUE BACK AND FORTH AND THEN GO TO THE NEXT ONE.

THE COURT: OKAY.

MR. CAULEY: IF YOUR HONOR WILL FORGIVE MY COUGHING. I WILL KEEP MY WATER AT HAND.

THE COURT: OKAY.

MR. CAULEY: IF YOU COULD GO TO SLIDE ONE. I'M GOING TO GIVE A BACKGROUND OF JUST THE MCT PRODUCT, THAT'S THE ONE ON THE RIGHT, JUST FOR IDENTIFICATION PURPOSES -- I THINK THEY SHOWED THEIRS.

THIS PATENT IS BROAD. IT'S DIRECTED TO A LOW COST SOLUTION. I WANT TO DIRECT YOUR ATTENTION TO COLUMN 4, LINES 36 TO 39. IT SAYS: THE PRESENT INVENTION IS AIMED TO PROVIDE A SIMPLE AND LOW COST MEASURE FOR CONNECTING A HOST COMPUTER TO A DISPLAY DEVICE WITHOUT A HARDWARE BASED DISPLAY INTERFACE CARD MOUNTED INSIDE THE HOST COMPUTER.

IT'S REALLY BROAD. IT'S MEANT TO BE A VERY BROAD INVENTION.

COLUMN 3, LINES 66, TO COLUMN 4, LINE 2,

SAYS: BASED UPON THE ABOVE DESCRIPTION, THE OPERATION PROCESS OF THE USB TO VGA CONVERTER, THE USB TO VGA CONVERTER CAN WORK WITH ANY COMPUTER SYSTEMS RUNNING UNDER ANY OPERATION SYSTEMS.

SO -- SLIDE 2 -- SAYING -- SO WHAT WE'VE GOT HERE IS WE'VE GOT A VERY BROAD PATENT THAT, ESSENTIALLY, DR. JONES HAS TRIED TO REWRITE IMPORTING TERMS THAT AREN'T ANYWHERE IN THE PATENT.

YOU KNOW -- I MEAN I'VE SEEN PEOPLE PULL SPECIFICATIONS INTO THE CLAIMS. WHAT DR. JONES HAS DONE, AND THIS IS WHY WE DON'T RELY ON EXTRINSIC EVIDENCE, IS HE'S BROUGHT IN THINGS THAT AREN'T EVEN IN THE SPECIFICATIONS AND TRIED TO IMPORT THEM INTO THE CLAIMS. HE'S NOT MADE UP TERMS, BUT HE'S PUT TERMS IN HIS DEFINITIONS THAT AREN'T IN THE SPECIFICATIONS. THEY AREN'T IN THE CLAIMS, AND WE DON'T KNOW WHAT THEY MEAN.

WHAT WE'VE GOT HERE IS WE'VE -- I THINK AS DR. MIN WAS TESTIFYING FOR USB AND VGA -- WE'VE GOT EASILY UNDERSTOOD GENERIC TERMS THAT WERE UNDERSTOOD BY EVERYBODY THAT ARE USED COMMONLY IN THE COMPUTER INDUSTRY IN 2002. THEY ARE USED COMMONLY IN THE COMPUTER INDUSTRY NOW, AND THEY ARE UNDERSTOOD BY EVERYONE. AND --

THE COURT: ISN'T THAT EXTRINSIC

EVIDENCE? I MEAN IT SEEMED TO ME THAT THIS PATENT REALLY DOESN'T -- I MEAN, ANYWHERE, EXPRESSLY, VGA OR USB, AND WE ARE REALLY THEN SAYING, OKAY, WHAT DID THOSE TERMS MEAN TO SOMEONE ORDINARILY SKILLED IN THE ART AT THE TIME?

AND DR. MIN WAS, I THINK, CLEARER WHEN HE SAID THAT, INITIALLY, THAT YOU WOULD REFER TO THE IBM SPEC, BUT THEN OVER TIME IT BECAME GENERIC. WHEN DID THAT TAKE PLACE, IT SEEMS TO ME, IS TOTALLY EXTRINSIC EVIDENCE, ISN'T IT?

MR. CAULEY: I THINK TO THE EXTENT AND THAT'S WHY WE DESIGNATE IT AS YOUR HONOR NOTED, THAT DR. MIN FOR THOSE TWO SPECIFIC TERMS, SPECIFICALLY TO SAY WHAT A PERSON OF ORDINARY SKILL IN THE ART WOULD HAVE UNDERSTOOD THOSE TERMS TO MEAN IN 2002.

AND I THINK THAT PART OF THE BASIS FOR HIS OPINION, NOT JUST HIS EXPERIENCE IN THE INDUSTRY, BUT ALSO LOOKING AT THE PATENT ITSELF, ALSO SHOWS THAT THE PATENT IS ALSO USING THOSE TERMS GENERICALLY.

I THINK FOR THE MOST PART, OTHER THAN THOSE TWO TERMS, ALL OF OUR BASIS FOR ALL OF OUR TERMS IS ENTIRELY INTRINSIC. AND EVEN FOR USB AND VGA, I WOULD SAY IT'S AT LEAST HALF INTRINSIC. AND

THE ONLY INTRINSIC PART IS THE PERSON OF ORDINARY SKILL IN THE ART'S KNOWLEDGE OF WHAT THOSE TERMS ARE.

NEXT SLIDE. SO, THIS IS JUST A GENERAL DESCRIPTION TO SAY THAT WE ARE PRIMARILY RELYING ON THE CLAIM LANGUAGE AND THE WRITTEN DESCRIPTION AND THE PROSECUTION HISTORY. PRIMARILY, WE ARE RELYING ON THE LANGUAGE OF THE CLAIMS.

NEXT SLIDE. AND EXTRINSIC EVIDENCE -- I THINK, PRIMARILY, WHAT THEY ARE USING AREN'T EVEN TECHNICAL TREATISES OR PRIOR ART. THERE'S A LITTLE OF THAT, BUT A LOT OF WHAT THEY'RE RELYING ON IS DR. JONES' OWN KNOWLEDGE OUT OF HIS DECLARATION. AND I BELIEVE THAT THAT'S, AS THE PHILLIPS CASE TEACHES US, IS THE LEAST FAVORED KIND OF EXTRINSIC EVIDENCE. SO I THINK THAT'S PRIMARILY WHAT WE ARE VIEWING DISPLAYLINK AS RELYING ON.

NEXT SLIDE. SO LET'S GET TO USB. I THINK THE -- THERE'S TWO DISPUTES HERE WHICH ARE KIND OF INTERLINKED WITH EACH OTHER: IS THE TERM USB GENERIC AS USED IN THE PATENT? AND IS THE PATENT LIMITED TO USB 1.0, 1.1 AND 2.0, EXCLUDING ANY FUTURE VERSIONS?

AND I THINK AS YOUR HONOR NOTED, AS OF THE PRESENT DATE, IT DOESN'T REALLY MATTER BECAUSE

THERE IS NO COMPUTER THAT'S USING ANY FUTURE VERSIONS. BUT THIS PATENT DOESN'T EXPIRE FOR A WHILE, AND WE BELIEVE IT SHOULD APPLY TO VERSIONS OF THE PATENT THAT ARE -- IT SHOULD APPLY TO VERSIONS OF USB THAT COME UP IN THE FUTURE, AS LONG AS THOSE ARE COMPATIBLE WITH A USB PORT OR PLUG. AS LONG AS YOU COULD PLUG THEM INTO A USB PORT, USE A USB PLUG, AND AS FAR AS WE ARE CONCERNED, THAT THAT IS COVERED BY USB IN THE PATENT.

AND I THINK THAT ONE OF THE -- THERE'S A LOT OF REFERENCES IN THE PATENT TO HOW GENERAL IT IS -- SLIDE FIVE -- THE SPECIFICATION REFERS TO USB GENERALLY. IT SAYS: THE PRESENT INVENTION RELATES GENERALLY TO USB TO VGA CONVERTER.

THERE'S NOTHING IN THE SPECIFICATIONS THAT MENTIONS ANY OF THE VERSIONS. THERE WERE, AS DR. MIN DESCRIBED, THREE VERSIONS OF USB THAT WERE PUBLISHED AS OF 2002, AND IT DOESN'T MAKE A REFERENCE TO ANY OF THEM BY NAME. IT REFERS TO THEM ALL AS ONE. AND SO I THINK THAT SUPPORTS THE USE OF THE TERM AS UNDERSTOOD AS BEING GENERAL.

THE PART THAT I READ FROM COLUMN 3, IT APPLIES TO ANY COMPUTER SYSTEM. AND I THINK IF YOU LOOK AT COLUMN 4, IT GENERALLY DESCRIBES -- COLUMN 4, LINES 15 ALL THE WAY DOWN TO 35, IT TALKS

GENERALLY ABOUT USB SOCKETS, USB PLUGS, USB CABLES, USB PORT, AND IT'S CLEAR THAT THE PATENT IS USING THE TERM USB IN A GENERIC MANNER.

AND I THINK ONE OF THE ISSUES THAT DISPLAYLINK RAISED IS WHETHER THIS APPLIES TO FUTURE TECHNOLOGY.

AND WHAT THEY HAD SAID IN THEIR BRIEF WAS THAT THE USB COULD NOT ENCOMPASS FUTURE VERSIONS OF THE STANDARD. AND I BELIEVE THAT'S CONTRARY TO THE FEDERAL CIRCUIT'S VIEW ON CLAIM CONSTRUCTION. AND I WILL JUST REFER THE COURT TO THE RECENT DECISION IN INNOGENETICS VERSUS ABBOTT LABORATORIES.

512 FEDERAL CIRCUIT 3D, 1316. AND IT'S FEDERAL CIRCUIT 2008. AND IT READS AT PAGE 1371 TO 72, "OUR CASE LAW ARISES -- ALLOWS FOR AFTER ARISING TECHNOLOGY TO BE CAPTURED WITHIN THE LITERAL SCOPE OF VALID CLAIMS THAT ARE DIRECTED BROADLY ENOUGH."

AND THAT CASE CITES, AND I WILL ALSO MENTION, SUPERGUIDE CORPORATION VERSUS DIRECTTV ENTERPRISES, INC. 358 F 3D 870, WHICH IS FEDERAL CIRCUIT 2004. IN THAT CASE THEY WERE TALKING ABOUT -- THEY HAD A CLAIM LIMITATION THAT TALKED ABOUT A REGULARLY RECEIVED TELEVISION SIGNAL.

AND AT THAT TIME THERE WAS NO SUCH A

THING AS DIGITAL SIGNALS AT THE TIME THAT PATENT WAS APPLIED FOR. BUT THE FEDERAL CIRCUIT FOUND IT DID APPLY TO THIS FUTURE TECHNOLOGY.

AND THE COURT SAID "HAD THE PATENTEES INTENDED TO LIMIT THE DISPUTED CLAIM TERMS TO ANALOG TECHNOLOGY, THEY COULD HAVE EASILY DONE SO BY SPECIFICALLY MODIFYING THE DISPUTED CLAIM LANGUAGE WITH THE TERM 'ANALOG'." AND SAID THE COURT, "THE LAW DOES NOT REQUIRE THAT AN APPLICANT DESCRIBE IN A SPECIFICATION, EVERY CONCEIVABLE AND POSSIBLE FUTURE EMBODIMENT OF HIS INVENTION."

SO WE WOULD SAY THE VERY BROAD USE OF THE TERM USB IS BROAD ENOUGH TO ENCOMPASS ALL VERSIONS OF USB EVEN IF THEY ARE COME UP WITH LATER. IF THE INVENTOR HAD MEANT TO RESTRICT HIS INVENTION THE WAY DISPLAYLINK WANTS TO, TO THE USB VERSIONS THAT WERE CURRENT AS OF 2002, HE COULD HAVE DONE SO.

JUST LIKE THE COURT MENTIONS IN SUPERGUIDE, HE COULD HAVE SAID IT RELATES TO CURRENT VERSIONS OF THE USB AND WE WOULD HAVE KNOWN. BUT HE DIDN'T DO THAT, HE USED THE TERM USB GENERICALLY THROUGHOUT THE PATENT. SO WE THINK THAT THAT'S A BROAD, GENERIC TERM THAT APPLIES TO ALL VERSIONS OF USB THAT ARE COMPATIBLE WITH THE USB PORT AND PLUG, EVEN IF THEY COME UP LATER.

THE COURT: AND HOW DO YOU DEFINE THE USB PORT AND PLUG?

MR. CAULEY: THE USB PORT AND PLUG, AS IT'S GENERALLY UNDERSTOOD TODAY, THE ONE THAT'S IN CURRENT USE --

THE COURT: HOW DO YOU DEFINE IT?

MR. CAULEY: IT WOULD BE A USB PORT AND PLUG THAT WOULD MEET THE CURRENT SPECIFICATIONS. THE PORT AND PLUG WOULD MEET THE CURRENT SPECIFICATIONS, BUT YOU MIGHT HAVE A USB STANDARD THAT WOULD BE HIGHER THAN THAT, THAT WOULD STILL USE THE USB PORT AS PRESENTLY USED. IT WOULD BE INCOMPATIBLE WITH THOSE, I THINK, THAT IT WOULD NOT COME UNDER IT --

THE COURT: THE CURRENT USB PORT AND PLUG?

MR. CAULEY: USB PORT AND PLUG.

THAT'S ALL I HAVE ON THAT, YOUR HONOR.

THE COURT: OKAY.

MR. YOON?

MR. YOON: YES, YOUR HONOR. A COUPLE OF THINGS.

I HAVE A PRACTICAL SUGGESTION FIRST THAT MAYBE CAN SAVE US SOME PAIN, BUT THEN I ALSO HAVE SOME CRITIQUES TO WHAT COUNSEL JUST SAID.

THE PARTIES HAVE TWO DISAGREEMENTS -- TWO FUNDAMENTAL DISAGREEMENTS. ONE IS THAT WE HEAR ARGUMENTS FROM MCT, BUT WHAT THEY ARGUE ABOUT AND WHAT THE TEXT OF THEIR CONSTRUCTION IS ARE TWO DIFFERENT THINGS. I'M GOING TO GET TO THAT.

THE SECOND ISSUE, YOUR HONOR, IS THE ISSUE OF: DOES IT COVER FUTURE VERSIONS OF THE STANDARD? AND YOUR HONOR, OUR ISSUE WITH THIS HAS ALWAYS BEEN, AND COUNSEL HAS JUST ARTICULATED IT, IS WE DON'T KNOW WHAT THE FUTURE STANDARD HAS. WE DON'T KNOW WHAT PLUGS THE FUTURE STANDARD WOULD USE. WE DON'T KNOW WHAT TECHNIQUES THEY MIGHT HAVE.

AND THIS COURT, IN A VACUUM, SHOULD NOT HAVE TO GUESS WHETHER IT FALLS WITHIN THE SCOPE OF THE CLAIM OR NOT BECAUSE YOU DON'T HAVE A RECORD IN WHICH YOU CAN MAKE A DECISION.

CLAIM CONSTRUCTION ORDERS ARE INTERIM ORDERS, YOUR HONOR. YOU COULD ISSUE AN ORDER AND IF A NEW PRODUCT CAME UP OR USB STANDARD CAME UP DURING THE CASE, WE COULD COME BACK AND REVISIT THE ISSUE.

ALSO IN YOUR DECISION, YOUR HONOR, YOU COULD SAY THAT AT THIS TIME, THE COURT DOESN'T MAKE ANY DECISION ONE WAY OR THE OTHER AS TO ABOUT

FUTURE VERSIONS.

SO I THINK THAT IS THE WAY TO HANDLE THE ISSUE. I MEAN, THIS COURT SHOULD NOT BE MAKING A DECISION WITH SOMETHING GOING TEN YEARS OUT, WHEN IT DOESN'T HAVE A RECORD BEFORE IT. AND THIS COURT IS NOT REQUIRED TO IN ITS ORDER.

SO MY SUGGESTION ON THAT, YOUR HONOR, WOULD BE THE COURT RESERVE JUDGMENT ON THE FUTURE ISSUE. BUT AS TO THE ACTUAL CONSTRUCTION THE PARTIES DISPUTE YOUR HONOR, AT THE TIME THE '788 PATENT WAS FILED, THE PLAIN AND ORDINARY MEANING OF THE UNIVERSAL SERIAL BUS, USB, AS YOU HEARD FROM DR. MIN, UNDISPUTEDLY WAS THE THEN EXISTING VERSIONS OF THE USB STANDARD, WHICH AT THE TIME OF FILING WAS USB 2.0 AND IT'S PREDECESSORS. THAT IS UNDISPUTED AND YOU HEARD DR. MIN TESTIFY TO THAT FACT.

USB IS NOT A GENERIC TERM THAT REFERS TO ANY SERIAL BUS SPECIFICATION WHICH SUPPORTS UNDEFINED USB BASED DISPLAY SIGNALS FROM A HOST COMPUTER AND WHICH ARE "COMPATIBLE" WITH ANY USB PORT AND PLUGS.

APPARENTLY, YOUR HONOR, COUNSEL, RECOGNIZING THE PROBLEM WITH FUTURE PRODUCTS, HAS MODIFIED THE CONSTRUCTION. IT'S NOW ANY USB PORT

AND PLUG THAT EXISTED AS OF THE FILING DATE OF THE PATENT.

BUT YOU CAN SEE THE PROBLEM, YOUR HONOR. THEIR POSITION IS NOT THAT WE'VE LIMITED IT SOMEHOW; IN FACT, WE RECOGNIZE ALL EXISTING VERSIONS OF USB. WE WON'T SAY TEN YEARS FROM NOW THAT THERE'S A USB VERSION THAT'S COVERED. WE CERTAINLY DO NOT BELIEVE IT COVERS ANY SERIAL BUS SPECIFICATION, IT COVERS THE USB SPECIFICATION THAT IS THE INDUSTRY STANDARD, INDUSTRY ACCEPTED.

IF I COULD HAVE SLIDE 11, PLEASE.

THE PATENT IS VERY CLEAR ON THIS, YOUR HONOR. IT SAYS THAT USB REFERS TO UNIVERSAL SERIAL BUS. THE PATENT DOES NOT SAY IT REFERS TO ANY TYPE OF SERIAL BUS. IT REFERS TO THE UNIVERSAL SERIAL BUS.

NOW, YOUR HONOR, IT WAS VERY INTERESTING WHEN COUNSEL STARTED -- COUNSEL SAID THIS WAS A GENERAL PATENT, THEN IT WAS A REALLY GENERAL PATENT, THEN IT WAS A VERY GENERAL PATENT, THEN IT WAS A VERY GENERAL, BROAD PATENT.

IT'S CLEAR THE CLASSIC PLAINTIFF WAY THEY'RE TRYING TO EXPAND THE SCOPE OF THE CLAIM. THE WORD "GENERALLY" IN THE BACKGROUND OF THE INVENTION DOES NOT MODIFY OR ALTER THE MEANING OF

USB OR VGA. IT JUST SAYS IT RELATES GENERALLY TO A USB TO VGA CONVERTER.

COUNSEL KEEPS GRABBING THE WORD GENERALLY TO SOMEHOW SUGGEST THAT CHANGES OR MODIFIES THE MEANING. AND I THINK, YOUR HONOR, THE TWO CASES COUNSEL CITED, THE INNOGENETICS CASE WHERE THE COUNSEL QUOTED, "OUR CASE LAW ALLOWS FOR AFTER ARISING TECHNOLOGY TO BE CAPTURED WITHIN THE LIBERAL SCOPE OF VALID CLAIMS." THAT OCCURS IN THE INFRINGEMENT SECTION OF THE OPINION, YOUR HONOR. THAT DOESN'T OCCUR IN THE CLAIM CONSTRUCTION.

USB MEANS WHAT USB MEANS TO A PERSON OF ORDINARY SKILL. VGA MEANS WHAT VGA MEANS.

SIMILARLY, YOUR HONOR, THE ISSUE IN THE SUPERGUIDE CASE THAT COUNSEL HANDED TO ME BEFORE THE HEARING WAS NOT THE MEANING OF THE TERM USB OR VGA, THE ACTUAL TERM, BUT INSTEAD OF WHETHER OR NOT THE "PHRASE REGULARLY RECEIVED TELEVISION SIGNALS" WOULD COVER DIGITAL AS WELL AS ANALOG.

AND THE FEDERAL CIRCUIT CORRECTLY SAID THAT THE PATENT IS NOT LIMITED TO THE PREFERRED EMBODIMENT, AND THE PHRASE "REGULARLY RECEIVING TELEVISION SIGNALS" DOESN'T MENTION EITHER ANALOG OR DIGITAL.

HERE, YOUR HONOR, THE QUESTION IS: WHAT

IS THE MEANING OF THE ACTUAL TERM? AND IT'S UNDISPUTED THAT USB REFERS TO THE TECHNOLOGY SET FORTH IN THE INDUSTRY STANDARD SPECIFICATIONS. IT DOES NOT REFER TO ANY TYPE OF SERIAL BUS STANDARD THAT SOMEHOW SUPPORTS SOME ASPECT OF USB AND IS "COMPATIBLE" WITH SOME TYPE OF USB CONNECTOR.

IF I COULD HAVE SLIDE 12.

YOUR HONOR, IF YOU LOOK AT THE BRIEFING AND THE CONSTRUCTIONS THAT WERE SUBMITTED TO THIS COURT, IN IT'S OPENING BRIEF MCT SAID -- IT'S PAGES 23 AND 24 -- "THE USB PORT AND USB CABLE ARE BUILT UPON AN INDUSTRY ACCEPTED USB STANDARD." THAT'S ALL THAT DISPLAYLINK SAYS IT IS. IT'S THE INDUSTRY STANDARD SPECIFICATION THAT EXISTED AT THE TIME OF FILING.

MCT'S DEFINITION OF USB CONTROLLER IS "A DEVICE THAT COMMUNICATES WITH THE COMPUTER ACCORDING TO THE USB STANDARD."

AGAIN, IT DOESN'T GENERICALLY REFER TO ANY TYPE OF SERIAL BUS STANDARD, IT REFERS TO THE INDUSTRY ACCEPTED USB STANDARD.

AND IF I COULD HAVE DEPENDENT CLAIMS 2 AND 4 ON THE SCREEN.

YOUR HONOR, I THINK THESE CLAIMS ARE VERY TELLING, YOUR HONOR. YOU WILL SEE THIS REPEATS

ITSELF ON VGA. DEPENDENT CLAIM 2 AND DEPENDENT CLAIM 4 OF THE PATENT ADD, AS A LIMITATION, A USB SOCKET, WHICH IS ANOTHER WAY OF SAYING A USB PLUG.

SO YOU HAVE THE USB SOCKET, YOU HAVE THE USB SOCKET CONNECTED TO THE USB PORT. THOSE ARE DEPENDENT CLAIMS.

THE TERM USB WHICH OCCURS IN THE INDEPENDENT CLAIM, IS NOT DEFINED BY THE SOCKET OR PLUG. THOSE ARE DEPENDENT CLAIMS.

BILL, IF I COULD HAVE CLAIM 1 ON THE SCREEN, PLEASE. I THINK THAT WAS SLIDE 8 OR 9, BILL. I THINK SLIDE 9 -- NEXT ONE -- SLIDE 9.

SO, YOUR HONOR, HERE IS CLAIM 1 ON THE SCREEN. AND CLAIM 1 YOU CAN SEE USB APPEARS THERE AND IT TALKS ABOUT A USB PORT, A USB CONTROLLER, USB BASED DISPLAY SIGNALS. IT DOES NOT RECITE A SOCKET OR PLUG. THAT AGAIN OCCURS IN THE DEPENDENT CLAIM. THE TERM USB DOES NOT REFER TO ANYTHING THAT USES A "USB PLUG".

AND IF I COULD -- MCT SLIDE 11 ON THE SCREEN FOR A MOMENT.

YOUR HONOR, THIS IS THE ONE I SHOWED YOU EARLIER. THE WORD "GENERALLY," HERE IN THE BACKGROUND OF THE INVENTION, WAS NOT MEANT TO MODIFY OR ALTER THE NORMAL MEANING OF THE TERM USB.

THAT'S THE ISSUE BEFORE THE COURT HERE.

AND IF I COULD HAVE SLIDE 5, PLEASE.

YOU KNOW, YOUR HONOR, I KNOW THAT YOU HEAR THE PHILLIPS CASE A LOT, BUT THE KEY FIND HERE IS THAT PHILLIPS WAS ABSOLUTELY CLEAR THAT THE ORDINARY CUSTOM MEANING OF THE CLAIM TERM IS DEFINED AS OF THE EFFECTIVE FILING DATE OF THE APPLICATION. THAT IS WHAT PHILLIPS SAYS THE ORDINARY TERM IS.

DISPLAYLINK'S CONSTRUCTION APPLIES THE ORDINARY MEANING OF USB THAT EXISTED AS OF THE FILING DATE OF THE PATENT. AND AS DR. MIN TESTIFIED, THAT'S WHAT WE IDENTIFIED.

THANK YOU, YOUR HONOR.

THE COURT: I'M CURIOUS. BOTH OF YOU CAN RESPOND TO THIS. OBVIOUSLY, DICTIONARY DEFINITIONS HAVE HAD THEIR UPS AND DOWNS WITH THE FEDERAL CIRCUIT.

MR. YOON: YES, YOUR HONOR.

THE COURT: AND THIS CASE, HOWEVER, IN SOME WAYS, STRIKES ME AS ONE WHERE THE DICTIONARY DEFINITION IN 2001 OR '02 MIGHT BE VERY ENLIGHTENING AS TOO WHAT SKILL SOMEONE SKILLED IN THE ART THOUGHT WHAT VGA OR USB MEANT.

MR. YOON: WELL, WITH REGARDS TO THE USB

ONE -- BILL, COULD I HAVE SLIDE 13 ON THE SCREEN.

THE PARTIES AGREE THAT THE INDUSTRY UNDERSTOOD THE -- HAD A UNIVERSAL SERIAL BUS SPECIFICATION. THAT WAS -- UNLIKE A GENERAL DICTIONARY, YOUR HONOR, THIS CASE CERTAINLY -- THERE'S NO DISPUTE THAT THERE WERE INDUSTRY ACCEPTED SPECIFICATIONS.

AND WHAT THE USB SPECIFICATION 2.0 SAYS: THIS SPECIFICATION SETS FORTH THE TECHNOLOGY REQUIRED TO DESIGN AND BUILD SYSTEMS AND PERIPHERALS THAT ARE COMPLIANT WITH THIS STANDARD.

CERTAINLY YOUR HONOR, WE AGREE THAT USB IS DEFINED BY THE USB SPEC. OF COURSE, THERE IS NO DICTIONARY IN 2002 THAT WOULD TELL YOU ABOUT THE FUTURE, BUT AS TO WHAT THE MEANING OF USB IS WE ABSOLUTELY AGREE, YOUR HONOR, THAT IN THE CONTEXT OF USB, I DON'T THINK THERE'S A DISPUTE BETWEEN THE PARTIES.

AS TO VGA YOUR HONOR, THERE IS A DISPUTE WHICH WE ARE GOING TO GET TO NEXT. AND YOU HEARD WITH THE TESTIMONY OF DR. MIN, WE IDENTIFIED ALL THE VGA SPECS. SUPER VGA WAS DONE BY A DIFFERENT COMPANY, XGA WAS SOMEONE ELSE.

THE COURT: LET'S LET HIM GET THERE FIRST -- OR WAS YOUR AGREEMENT -- WHO GOES NEXT?

MR. YOON: NO. ARE WE GOING TO DO VGA NEXT? HE GOES FIRST ON VGA.

THE COURT: OKAY. GO AHEAD.

MR. CAULEY: SO WE JUST BOUNCE BACK AND FORTH.

SLIDE 9. AGAIN, THIS IS PRETTY MUCH THE SAME ISSUE AS THE LAST ONE BUT IT'S A LITTLE BIT DIFFERENT BECAUSE FOR USB, WHAT DISPLAYLINK IS TRYING TO EXCLUDE IS FUTURE VERSIONS OF USB.

IN THIS ONE THEY ARE TRYING TO EXCLUDE CURRENT VERSIONS OF VGA BY SAYING THAT A PATENT THAT WAS APPLIED NEAR 2002 AND USES THE TERM VGA IS REFERENCING A STANDARD THAT WAS WRITTEN IN 1988. AND NO OTHER STANDARD. AND NOT EVEN REFERENCING THE STANDARDS THAT WERE BEING ACCUSED CURRENTLY.

DR. MIN TALKED ABOUT, AND I THINK DR. JONES ALSO AGREED, THAT THE STANDARDS THAT WERE BEING USED BY ESSENTIALLY YOU AND ME, IN 2002, WERE -- VGA WASN'T BEING USED BY NORMAL PEOPLE IN BUSINESSES AND IN THEIR HOMES.

SLIDE 13. AND THIS IS -- THE RESOLUTION OF VGA IS 640 BY 480. AND SO HE WAS ASKED -- BASICALLY, WHO WOULD USE THAT? AND SAY, INDUSTRIAL COMPUTERS, POINT OF SALE TERMINALS, RAILWAY STATIONS. CONSUMERS WOULD USE XVGA -- XGA AS VGA

XGA.

THIS IS A PATENT THAT'S BEING APPLIED FOR IN 2002 FOR A PRODUCT THAT'S MEANT TO BE USED IN A LOW COST ENVIRONMENT -- AND WHEN I SAY THE PATENT IS GENERAL -- WHEN I SAY THAT THE PATENT SAYS THE USB TO VGA CONVERTER CAN WORK WITH ANY COMPUTER SYSTEMS RUNNING UNDER ANY OPERATION SYSTEMS, I'M NOT SURE IT GETS MORE GENERAL THAN THAT.

DISPLAYLINK'S CONSTRUCTION WOULD RESTRICT THIS TO ESSENTIALLY NOTHING. AS DR. MIN NOTED, THE CURRENT VERSION OF WINDOWS, WINDOWS XP WHICH CAME OUT SHORTLY BEFORE THE PATENT WAS APPLIED FOR, DOESN'T EVEN RUN VGA. IT RUNS, I THINK AS COUNSEL IS TRYING TO SPLIT THE DIFFERENCE, COMPUTERS THAT RUN WINDOWS XP WILL SHOW SOMETHING WITH A RESOLUTION OF VGA IN THE SPLASH SCREEN WHEN THE COMPUTER FIRST STARTS UP, AS DR. MIN NOTED, BUT THEN THEY DON'T RUN IT. WHEN IT'S ACTUALLY RUNNING WINDOWS IT ISN'T COMPATIBLE WITH VGA.

AND AS THE PATENT NOTES IN COLUMN 3, LINE 54, "THE OPERATION DISCUSSED HEREIN IS BASED ON THE WINDOWS OPERATION SYSTEM RELEASED BY MICROSOFT COMPANY."

SO THIS HAS TO RUN ON A WINDOWS-BASED COMPUTER. THERE'S A WINDOWS BASED COMPUTER IN 2002

THAT DOESN'T EVEN SUPPORT THIS STANDARD AT ALL. AND AS DR. JONES NOTES, IT'S ESSENTIALLY -- IT'S A USELESS STANDARD. IT DOESN'T RUN ON -- IT RUNS IN INDUSTRIAL APPLICATIONS AND RAILWAY STATIONS.

SO AGAIN, JUST LIKE USB, AND AS DR. MIN NOTED, IN A PERSON OF ORDINARY SKILL IN THE ART IN 2002 AND TODAY THEY REFER TO VGA PLUGS, VGA PORTS AND VGA CABLES. AND IT JUST DOESN'T, YOU KNOW, IT DOESN'T APPLY TO, -- IT'S NOT USED IN -- THE TERMS VGA PORTS, PLUGS AND CABLES ARE USED IN THE PATENT THROUGHOUT AND NOT SAYING -- NOT DIRECTING IT TO PARTICULAR VERSIONS OF THE VIDEO STANDARD.

THE COURT: HOW DO YOU DEFINE VGA?

MR. CAULEY: WE WOULD DEFINE VGA AS BEING THE GENERIC TERM FOR VIDEO DISPLAY STANDARDS THAT WORK WITH THAT PLUG THAT'S UP IN THE UPPER RIGHT-HAND CORNER.

IF BASICALLY, YOU CAN SHOVE VIDEO THROUGH THAT PLUG USING THOSE PINS, THEN WE WOULD DEFINE THAT AS VGA. I THINK THAT'S CLEAR THAT THAT'S WHAT THE INVENTOR MEANT. THAT THE INVENTOR WAS USING THE TERM GENERICALLY. AND AS DR. MIN NOTED, ALL OF THOSE OTHER STANDARDS USE THAT SAME PLUG WITH THE SAME NUMBER OF PINS.

THE COURT: IT'S THE SAME SIGNALS.

MR. CAULEY: SAME SIGNALS.

THE COURT: ON EACH PIN.

MR. CAULEY: IT'S DIFFERENT DATA RATES BUT IT'S STILL USING THE SAME PLUG, SAME CABLES.

THE COURT: SO YOU WOULD BE HAPPY WITH A DEFINITION THAT SAID THAT IT HAD TO HAVE THE SAME PIN LAYOUT WITH THE PINS RECEIVING THE SAME SIGNALS.

MR. CAULEY: IT WOULD HAVE TO BE COMPATIBLE WITH THAT, BECAUSE I THINK AS MR. YOON NOTED WAS THAT IN ONE OF THE EMBODIMENTS, THERE IS A USB TO USB, BECAUSE THE VGA CONVERTER IS INSIDE THE MONITOR, IT'S PHYSICALLY INSIDE THE MONITOR CABINET.

WE WOULD SAY THAT VIDEO SIGNALS THAT ARE COMPATIBLE WITH THAT PIN STRUCTURE, WHETHER OR NOT IT'S ACTUALLY GOING THROUGH THAT PIN STRUCTURE. BUT IF THE VIDEO SIGNALS COULD BE TRANSFERRED THROUGH A MONITOR TO THAT 15-PIN PLUG WE WOULD SAY THAT'S VGA, WHETHER OR NOT IT'S ACTUALLY DOING THAT.

I JUST WANTED TO NOTE TO THE COURT THAT ON SLIDE 14, THAT THE HIGHLIGHTED PORTION, DISPLAYLINK, ITSELF, USES THE TERM USB AND VGA GENERICALLY. I'M PRETTY SURE FROM SHANBERG'S

PRESENTATION THAT DISPLAYLINK PRODUCTS ARE NOT HOOKING UP TO RAILWAY STATION MONITORS AND INDUSTRIAL APPLICATIONS. IT SHOWED THEM CONNECTING UP TO FIVE DIFFERENT KINDS OF VIDEO DISPLAYS, BUT STILL, THIS IS RIGHT FROM THEIR WEBSITE, THAT THEY USE THE TERM VGA GENERICALLY. AND WE BELIEVE THAT THE INVENTOR DID TOO.

THAT'S ALL I HAVE, YOUR HONOR.

IF WE COULD HAVE SLIDE 15 ON THE SCREEN, BILL.

AS A COUPLE OF THINGS, YOUR HONOR, AS A PRELIMINARY MATTER. I THINK COUNSEL HAS NOW DEMONSTRATED THAT THEIR CONSTRUCTION IS FATALLY INDEFINITE. IT'S NO LONGER WHETHER YOU ACTUALLY HAVE -- IT CAN BE ANY VIDEO STANDARD. EVEN IF YOU DON'T USE A VGA PLUG.

IF YOU, THEORETICALLY, COULD USE THE PLUG AND, THEORETICALLY, THAT SOMETHING COULD SUPPORT THAT 15 PINS, IT NOW FALLS WITHIN THE SCOPE OF VGA. I MEAN, THAT DEMONSTRATES THEY ARE TRYING TO EN COMPASS EVERYTHING. THEIR INSTRUCTION, CONTRARY TO THE HISTORY LECTURES WE'VE BEEN GETTING, IS NOT THAT IT COVERS A CERTAIN SET OF WELL KNOWN STANDARDS THAT THE INDUSTRY BELIEVED WOULD BE VGA. NO. THEY SAY IT'S GENERICALLY REFERRING TO ALL

VIDEO STANDARDS COMPATIBLE WITH ANY 15-PIN VGA PORT OR PLUG WHETHER OR NOT YOU EVEN USE THE PLUG. IT COVERS EVERYTHING. AND THAT'S WHAT THEY ARE TRYING TO SAY WHEN THEY SAY "VERY BROAD, VERY GENERAL."

BASICALLY, YOUR HONOR, THE OTHER ISSUE IS THIS IS VERY DIFFERENT THAN THE SITUATION WITH USB. IN USB THERE WAS USB 1.0, THERE WAS USB 1.1, AND THERE WAS USB 2.0, ALL OF WHICH WERE PREPARED BY THE SAME GROUP AND ORGANIZATION. THEY WERE ALL INDUSTRY ACCEPTED; THEY ALL WENT THROUGH THE PEER-REVIEW PROCESS.

HERE, AND I BELIEVE MS. SHANBERG SHOWED IN TUTORIAL, YOU HAVE THE INDUSTRY FLOODING THE MARKET WITH DIFFERENT SPECIFICATIONS FOR VIDEO. NONE OF THESE HAVE ANY RELATIONSHIP COMPANY-WISE, AUTHOR-WISE OR ANYTHING.

DR. MIN, FOR EXAMPLE, TESTIFIED THAT SUPER VGA WAS NOT AT ALL PREPARED BY IBM. XGA WHICH WAS PREPARED BY IBM. IT'S TELLING THAT IBM DID NOT CALL THAT VGA 2.0, THEY CALLED IT SOMETHING TOTALLY DIFFERENT, THE EXTENDED GRAPHICS ARRAY, AND THAT'S A KEY POINT.

MCT CONSTRUCTION VIOLATES THE MOST FUNDAMENTAL BASIC ASSUMPTION OF CLAIM CONSTRUCTION. IT'S WHAT THE TERM MEANS TO SOMEONE OF ORDINARY

SKILL IN THE ART AT THE TIME THE PATENT WAS FILED.

HERE, THEY ARE TRYING TO CAPTURE THE FUTURE, AGAIN, BY SAYING IT REFERS TO ALL STANDARDS COMPATIBLE WHETHER OR NOT YOU USE THE PLUG. LET'S SEE WHAT THE PATENT SAYS.

MR. YOON: IF I COULD HAVE SLIDE 19 OF MY MARKMAN PRESENTATION ON THE SCREEN.

THE PATENT SAYS VGA VIDEO GRAPHICS ARRAY. IT VERY CLEAR, INSTEAD OF REFERRING TO VGA AS COUNSEL SUGGESTED IN SOME GENERAL TERM, THE PATENT EXPRESSLY SAYS VIDEO GRAPHICS ARRAY. IT DOESN'T SAY "EXTENDED GRAPHICS ARRAY," IT DOESN'T SAY "SUPER VIDEO GRAPHICS ARRAY," IT DOESN'T SAY "QUAD EXTENDED GRAPHICS ARRAY." IT SAYS "VIDEO GRAPHICS ARRAY."

AND IT'S UNDISPUTED AT THE TIME THE PATENT WAS FILED, THAT XGA, EXTENDED GRAPHICS ARRAY, AND SVGA WERE IN EXISTENCE.

THE PURPOSE OF A PATENT IS TO PROVIDE NOTICE. IT'S TO PUT THE PUBLIC ON NOTICE AS TO WHAT THE CLAIM COVERS AND DOES NOT COVER. AND WHAT MCT DOES IS SAY, FORGET THE NOTICE FUNCTION, IT COVERS EVERYTHING. THEY KNEW ABOUT XGA AND SVGA; THEY NEVER IDENTIFIED IT; THEY NEVER DISCLOSED IT. INSTEAD, THEY EXPRESSLY TIED THE TERM VGA TO THE

TERM VIDEO GRAPHICS ARRAY, A TERM THAT ORIGINATED WITH IBM.

AND YOUR HONOR, YOU ASKED THE QUESTION, I BELIEVE, ABOUT DICTIONARY DEFINITIONS. IT'S UNDISPUTED THAT THE ONLY DOCUMENT THAT SAID VGA, VIDEO GRAPHICS ARRAY, ARE THE SPECIFICATIONS THAT WE IDENTIFIED, THE IBM SPECIFICATIONS.

YOU NOTICE THAT COUNSEL DID NOT SUBMIT THE SPECIFICATIONS FOR XGA OR SVGA OR QXGA BECAUSE THEY DON'T SAY THEY ARE VGA, THEY SAY THAT THEY ARE XGA. AND A PERSON OF ORDINARY SKILL IN THE ART WILL UNDERSTAND THAT, AND THAT IS A KEY POINT HERE, YOUR HONOR.

MR. YOON: IF WE COULD GO TO SLIDE 11.

NOW, AGAIN, YOUR HONOR, I WON'T BELABOR THE POINT. THEY TAKE THE WORD "GENERALLY" AND THE FIELD OF THE INVENTION TO SAY THAT IT BASICALLY SUCKS ALL MEANING OUT OF THE TERM VGA TO COVER ALL VIDEO STANDARDS THAT, THEORETICALLY, COULD BE COMPATIBLE WITH THE 15-PIN PLUG WHETHER YOU USE IT OR NOT.

THE WORD "GENERALLY" DOES NOT TRANSFORM VIDEO GRAPHICS ARRAY INTO EXTENDED GRAPHICS ARRAY.

MR. YOON: IF I COULD SLIDE 21, PLEASE.

NOW, YOUR HONOR, YOU CAN CHECK THE RECORD

THAT PEOPLE SUBMITTED, YOU ALSO HEARD THE TESTIMONY OF DR. MIN. COUNSEL MAKES A BIG DEAL THAT WINDOWS RELEASED XP SHORTLY BEFORE THE PATENT. THE FACT IS WHEN IT RELEASED SHORTLY, IT TAKES A WHILE FOR THE TECHNOLOGY TO BECOME POPULAR.

THEY DON'T DENY THAT WINDOWS 95, WINDOWS 98, WINDOWS 2000 USED VGA, AND THAT THEIR OWN EXPERT TESTIFIED THAT MOST WINDOW COMPUTERS -- THIS IS MR. JONES, WE WILL GET TO DR. MIN IN A SECOND -- BUT DR. JONES SAID THAT MOST WINDOWS-BASED PERSONAL COMPUTERS INCLUDE SUPPORT FOR VGA AS PROMULGATED BY IBM IN 1987.

DR. MIN, YOU HEARD HIM TESTIFY, ADMITTED THAT AS OF THE FILING DATE OF THE PATENT, MOST COMPUTERS USED VGA. AND EVEN TODAY MOST COMPUTERS SUPPORT IT.

THERE'S AN ARGUMENT AS TO THE EXTENT OF THE SUPPORT, BUT THIS TECHNOLOGY IS STILL IN USE. AND THIS IS PARAGRAPH 10, RIGHT. AND ALSO, YOUR HONOR, WE WILL COME DOWN TO IT, PARAGRAPH 14 OF DR. JONES' DECLARATION, IS TELLING -- WHICH AS A PERSON OF ORDINARY SKILL WOULD UNDERSTAND -- THAT VGA REFERS TO MORE THAN A 15-PIN CONNECTOR. AS WE ARE GOING TO SEE, THAT'S SUPPORTED BY THE SPEC IN THE CLAIMS.

MR. YOON: IF WE COULD HAVE SLIDE 20, PLEASE.

NOW, INTERESTING ENOUGH, YOUR HONOR, THIS IS THE DEFINITION OF VGA SIGNALS ON THE SCREEN IN THE JOINT CLAIM CONSTRUCTION STATEMENT.

THE PARTIES AGREE THAT VGA SIGNALS REFER TO SIGNALS ACCORDING TO THE VGA STANDARD. THAT IS IN THE PARTY'S JOINT CLAIM CONSTRUCTION STATEMENT; MCT AGREED TO THAT. TODAY THEY WALKED AWAY FROM THAT. IT REFERS TO THE VGA STANDARD, SINGULAR, NOT A MULTIPLICITY OF STANDARDS.

IF I COULD HAVE THE NEXT SLIDE, PLEASE. SLIDE 22.

YOUR HONOR, YOU'VE ASKED A LOT OF QUESTIONS ABOUT THE PINS AND THE SIGNALS AND WHETHER OR NOT SOMEHOW THE PINS WOULD SOMEHOW BE COEXTENSIVE WITH THE STANDARD.

IT'S UNDISPUTED, AND YOU HEARD DR. MIN ADMIT, THAT SVGA SIGNALS WOULD NOT APPLY. BUT PARAGRAPH 13 OF DR. JONES' DECLARATION -- AND THIS IS UNDISPUTED. THEY DEPOSE THE MAN TWICE; THEIR EXPERT TOOK THE STAND. IT'S IMPORTANT TO KNOW THAT THE VGA STANDARD IS NOT CAPABLE OF SUPPORTING SVGA SPECIFIC COMMANDS AND/OR INSTRUCTIONS.

MR. YOON: NOW, IF WE COULD GO BACK TO

THE PREVIOUS SLIDE, BILL.

THE VGA STANDARD IS WHAT CAUSES -- DEFINES VGA SIGNALS. NOW, DR. MIN ADMITTED HERE ON THE STAND, HE ALSO ADMITTED IT ON THE DEPO, THAT IF AN XGA SIGNAL OR SVGA SIGNAL WERE TO APPLY TO A MONITOR THAT HAS ONLY THE CAPABILITY TO DISPLAY THE ORIGINAL VGA SIGNAL, IT WOULD NOT DISPLAY CORRECTLY. AND YOU HEARD DR. MIN TESTIFY TO THAT TODAY.

IF I COULD HAVE SLIDE 17.

YOUR HONOR, AND THIS IS THE KEY POINT. CLAIM CONSTRUCTION BEGINS WITH THE CLAIMS. IT BEGINS WITH THE WORDS OF THE CLAIMS. AND CLAIM 1 REFERS TO A VGA CONVERTER. CLAIM 1 REFERS TO A VGA CONTROLLER, VGA SIGNAL, AND NOWHERE IN CLAIM 1 IS THERE A REFERENCE TO A VGA PLUG. THE PATENT DOES NOT DEFINE VGA AS BEING COEXTENSIVE OR EQUAL TO THE PLUG.

YOU CAN PRACTICE THIS INTENTION WITHOUT USING THE VGA PLUG, AND THAT'S WHAT'S ADMITTED BY DR. MIN.

MR. YOON: AND IF COULD I COULD JUST PUT ON THE SCREEN FOR A SECOND, SLIDE 25.

I WON'T REPEAT OR DISCUSS ABOUT FIGURE 6, YOUR HONOR, BUT THAT WAS THE USB TO VGA CONVERTER

THAT USED ONLY USB CONNECTORS AND DID NOT HAVE A VGA PLUG, YET IT WAS A USB TO VGA CONVERTER. VGA TECHNOLOGY IS THE SIGNALS, THE INSTRUCTIONS THAT ARE SET FORTH IN THE VGA SPEC. IT WOULD BE IMPROPER TO COLLAPSE THAT INTO A PHYSICAL PLUG.

MR. YOON: IF I COULD HAVE SLIDE 27, PLEASE.

YOUR HONOR -- AND HERE'S A KEY POINT. YOUR HONOR, THIS IS NOT A CASE -- AND I THINK THAT'S EXTREMELY IMPORTANT -- THIS IS NOT IN A CASE OF AFTER-ACQUIRED TECHNOLOGY. YOUR HONOR, IBM CAME OUT WITH THE VGA STANDARD IN 8'7. SVGA WAS INTRODUCED IN '89. XGA WAS INTRODUCED IN '90.

IBM CAME OUT WITH THE REVISED VGA STANDARD IN 1991. IF IBM MEANT VGA TO COVER XGA, XGA WOULD HAVE BEEN CALLED VGA 2.0, OR VGA WOULD HAVE INCORPORATED OR SOMEHOW BEEN USED IN XGA.

AT THE TIME THE '788 PATENT WAS FILED, YOUR HONOR, SVGA, XGA AND VGA ALL EXISTED. THEY CHOSE ONLY TO USE VIDEO GRAPHICS ARRAY. AND THAT THE SPECIFICATION FOR VIDEO GRAPHICS ARRAY, THE '91 SPEC WHICH IS IN OUR CONSTRUCTION, CAME OUT AFTER SVGA OR XGA. IT'S NOT ANTIQUATED TECHNOLOGY, YOUR HONOR, IT WAS STILL IN USE AT THE TIME.

AND, YOUR HONOR, I THINK YOU MAY BE

FAMILIAR WITH THE CHEF AMERICA CASE WHERE THE FEDERAL CIRCUIT RULED THAT EVEN THOUGH THE CONSTRUCTION WOULD RENDER THE COOKING DEVICE UN-USEABLE SUCH THAT EVERYTHING WOULD BE BURNT TO A CRISP, THE PLAIN AND ORDINARY MEANING APPLIES.

THEIR ARE REGRETS AND THEIR ARE BUYER REMORSE ABOUT THE COMMERCIAL VIABILITY OF VGA GOING FORWARD, DOES NOT TRANSFORM THE TERM "VIDEO GRAPHICS ARRAY" INTO ANYTHING MEANING ANYTHING OTHER THAN IT ALWAYS MEANT, WHICH IS THE TECHNOLOGY DEFINED IN THE IBM SPEC.

IBM, WHO WROTE VGA, DID NOT INCLUDE XGA OR SVGA IN THEIR '91 SPEC. THEY COULD HAVE MENTIONED THAT IN THEIR SPECIFICATION; THEY COULD HAVE SAID VGA IS A GENERIC TERM; BUT NO, THEY TYPED VGA TO MEAN VIDEO GRAPHICS ARRAY.

THANK YOU.

THE COURT: WHAT --

MR. YOON: YES, YOUR HONOR.

THE COURT: IN VGA BLANK, WHETHER IT'S A CONTROLLER OR SIGNAL OR WHATEVER --

MR. YOON: YES.

THE COURT: -- WERE DEFINED AS: CONTROLLER DESIGNED AND BUILT IN ACCORDANCE WITH THE IBM STANDARDS OR SIGNAL GENERATED IN ACCORDANCE

WITH THE IBM STANDARD; WHAT WOULD YOUR REACTION BE?

MR. YOON: I BELIEVE, YOUR HONOR, THAT WOULD BE CONSISTENT WITH OUR UNDERSTANDING OF VGA WHICH IS TECHNOLOGY DEFINED BY THE IBM SPECIFICATION.

THE COURT: AS OPPOSED TO A DEFINITION THAT SAID, "COMPATIBLE WITH"?

MR. YOON: YES, YOUR HONOR.

AND THE KEY HERE IS WHAT COUNSEL SAID ABOUT, YOU DON'T EVEN HAVE TO USE THE PLUG. THE PROBLEM, YOUR HONOR, IS THAT REMEMBER, FOR EXAMPLE, EVERYONE HERE HAS FLAT PANEL SCREENS --

THE COURT: COMPATIBLE WITH THE STANDARD. IT WOULDN'T NECESSARILY REQUIRE A PLUG.

MR. YOON: THAT'S RIGHT, YOUR HONOR.

THE ONLY QUESTION IS WITH REGARD TO COMPATIBLE, YOU KNOW HOW COMPATIBLE IT IS. YOU'VE DEALT WITH PLENTY OF PATENT CASES, YOUR HONOR. PARTIES COULD ARGUE WHAT COMPATIBLE MEANS.

SO I FIND THERE'S POTENTIAL CONFUSION WHAT THAT MEANS. "COMPLIES WITH," THE SPECIFICATION OF THE STANDARD OF THE TERM THAT I WOULD FIND MORE DEFINITE AND LESS ROOM FOR THE PARTIES TO FIGHT ABOUT.

THE COURT: WHAT WOULD BE WRONG WITH

"COMPLIES WITH?"

MR. CAULEY: I SUPPOSE IT WOULD DEPEND ON WHAT IT COMPLIED WITH.

THE COURT: COMPLIES WITH THE STANDARD GENERATED BY IBM.

MR. CAULEY: WELL, IF IT'S IT IS 1988 STANDARD OR THE 1991 STANDARD, THEN WE DON'T THINK THAT'S SUPPORTED BY THE PATENT.

THE COURT: WHAT OTHER STANDARD IS THERE?

MR. CAULEY: ANY VIDEO STANDARD THAT CAN BE USED WITH THAT PLUG AND PORT. THAT WOULD RESTRICT THE PATENT TO ONE STANDARD THAT CAME OUT 14 YEARS BEFORE THE PATENT WAS APPLIED FOR.

THE COURT: WELL, I'M JUST TRYING TO DEFINE YOUR STANDARD.

MR. CAULEY: OUR STANDARD IS: ANY VIDEO STANDARD THAT CAN BE USED WITH WHAT IS COMMONLY KNOWN AS A VGA SOCKET, PLUG, CABLE. THOSE ARE CURRENT TERMS IN COMMON USE IN 2002 AND 2008.

AND IF YOU COULD PUT VIDEO SIGNALS THROUGH THERE, AND IT WILL DISPLAY ON A SCREEN, THEN WE WOULD SAY THAT'S WHAT THE INVENTOR MEANT BY VGA, USED GENERICALLY TO REFER TO ANY VIDEO STANDARDS. AND THAT'S THE WAY DISPLAYLINK, ITSELF, USES THE TERM, THAT IT'S NOT RESTRICTED.

I MEAN, DISPLAYLINK, IN ITS PROMOTIONAL LITERATURE, DOESN'T SAY, WE HAVE A USB TO VGA AND IT WILL ONLY DISPLAY ON A VGA MONITOR. THEY USE THAT IN THEIR OWN LITERATURE TO DESCRIBE XVGA, SVGA, EVERY KIND HERE.

THE COURT: I GUESS THE PROBLEM I'M HAVING IS TRYING FIGURE OUT HOW YOU DEFINE WHAT YOU SAY THIS STANDARD IS OTHER THAN BY SAYING, WELL, IT'S WHAT PEOPLE THOUGHT AT THE TIME WAS THE STANDARD.

MR. CAULEY: VGA, IT'S A GENERIC TERM IN COMMON USE BY ONE OF ORDINARY SKILL IN 2002, TO REFER TO ALL THESE VIDEO STANDARDS. AND VIDEO STANDARD -- THE VIDEO TECHNOLOGY WAS TRANSMITTED FROM A COMPUTER THROUGH THE VGA SOCKET THROUGH THE VGA PLUG -- THIS IS WHAT WE SAW ON THE SCREEN, THROUGH THIS CABLE UP TO THE MONITOR.

AND IN 2002, THEY WERE USING DIFFERENT STANDARDS THAT WERE CALLED DIFFERENT THINGS. AND IF IBM HAD THE SAME NAMING CONVENTIONS AS INTEL THEN MAYBE WE WOULDN'T HAVE THIS PROBLEM. BUT THEY DIDN'T CALL IT VGA 1.0, 2.0, 3.0. THEY COULD HAVE, BUT THEY GAVE THEM DIFFERENT NAMES FOR WHATEVER MARKETING REASONS THEY WANTED TO.

BUT STILL, EVERYBODY KNOWS THAT THAT'S

WHAT DISPLAYLINK CALLS IT. YOU CALL IT A VGA PLUG; YOU CALL IT A VGA CABLE; YOU CALL IT A VGA SOCKET. AND THEY, THEMSELVES --

THE COURT: OKAY. I GO HOME AND I SAY TO MY WIFE, I HEARD SOME TESTIMONY TODAY AND ARGUMENT ABOUT WHAT VGA SOCKET IS OR VGA CONTROLLER IS OR VGA DISPLAY IS, AND SHE SAYS TO ME, I UNDERSTAND WHAT A CONTROLLER IS, I UNDERSTAND WHAT A SOCKET IS, I UNDERSTAND WHAT A PLUG IS; WHAT DOES VGA MEAN?

HOW DO YOU ANSWER THAT?

MR. CAULEY: VGA, AS USED IN THE PATENT, REFERS GENERICALLY TO ALL THE VIDEO STANDARDS THAT YOU CAN DISPLAY ON A MONITOR THAT THE SIGNALS COME OUT OF A COMPUTER THROUGH THAT SOCKET, THROUGH THAT PLUG, THROUGH THAT CABLE, WHATEVER THEY ARE CALLED, WHATEVER THEIR NAMES ARE.

THE COURT: OKAY. WHAT YOU JUST TOLD ME IS MEANT BY ALL STANDARDS?

MR. CAULEY: ALL OF THE STANDARDS THAT ARE COMPATIBLE WITH THAT SOCKET, PLUG, CABLE.

THE COURT: WHERE DO I FIND THAT STANDARD?

MR. CAULEY: THIS IS ANOTHER ONE WHERE AS LONG AS THERE IS A STANDARD -- I MEAN, THERE ARE

LISTS OF STANDARDS, THERE IS -- I MEAN I THINK WE'VE IDENTIFIED YOU KNOW, PERHAPS, 6 OR 7 DIFFERENT NAMES FOR THOSE STANDARDS.

AND WHAT WE ARE SAYING IS THAT THE TERM VGA, AS USED IN THE PATENT, REFERS GENERICALLY TO ALL THE VIDEO STANDARDS. IT'S A GENERIC TERM YOUR VIDEO STANDARDS.

THE COURT: WHAT'S A VIDEO STANDARD?

MR. CAULEY: IT'S A STANDARD FOR THE DATA THAT COMES OUT OF A COMPUTER THAT'S TRANSMITTED THROUGH THE SOCKET, THROUGH THE PLUG, TO THE CABLE, TO THE MONITOR, IN A WAY THAT CAN BE DISPLAYED ON THE SCREEN AND COULD BE SEEN AT WHATEVER RESOLUTION THESE SPECIFICATION WILL SUPPORT.

THE COURT: SO IN OTHER WORDS, VGA MEANS BASICALLY THE PHYSICAL COMMUNICATION ROUTE BETWEEN THE COMPUTER AND THE DISPLAY?

MR. CAULEY: VGA WOULD REFER TO ANY OF THE STANDARDS THAT SUPPORT THE TRANSMISSION OF THAT DATA.

THE COURT: OKAY. BUT WHEN YOU SAY "STANDARDS," THAT IMPLIES THERE IS SOME STANDARD I CAN LOOK AT OR KNOW WHAT IT IS.

MR. CAULEY: YES. THERE'S A SERIES OF STANDARDS THAT ALL HAVE DIFFERENT NAMES. AS

COUNSEL NOTED THERE IS SVGA AND XVGA AND QVGA.

THE COURT: WHAT'S A STANDARD THAT'S NOT A VGA STANDARD?

MR. CAULEY: I'M NOT AWARE OF ONE, YOUR HONOR. THERE MAY BE SOME, BUT THE STANDARDS THAT ARE COMPLIANT WITH THIS TECHNOLOGY, THIS SOCKET, PLUG, CABLE, ALL WE WOULD SAY -- THAT'S WHAT THE INVENTOR MEANT WHEN HE USED THE TERM VGA.

AND IF HE HAD MEANT TO MAKE THIS A VERY NARROW PATENT AND IF HE HAD MEANT TO RESTRICT THIS USB TO VGA CONVERTER TO THE ORIGINAL VGA STANDARD IN 1988, WHICH WOULD BE PRETTY UNUSUAL AS DR. JONES NOTES, IT WAS BARELY IN USE IN 2002, HE COULD HAVE SAID THAT.

AND I THINK THAT IF WE ARE GOING SAY THAT VGA HAS THAT VERY CONSTRICTED MEANING THAT, IT'S GOT TO BE PRETTY CLEAR FROM THE PATENT THAT THAT'S WHAT THE INVENTOR MEANT.

THE COURT: I LOOK AT THE VGA STANDARD IN '88 AND IT'S REFINED IN '91. WHAT'S IT GOING TO BE TITLED AND WHAT'S IT GOING TO DESCRIBE, IN GENERAL?

MR. CAULEY: IT'S GOING TO DESCRIBE A STANDARD THAT WILL SUPPORT A 640 BY 480 RESOLUTION.

THE COURT: SO IT'S SUFFICIENT TO COMMUNICATE FROM THE COMPUTER --

MR. CAULEY: TO A MONITOR --

THE COURT: -- ELECTRICAL SIGNALS THAT WILL END UP WITH PIXELS OF THAT PARTICULAR SIZE.

MR. CAULEY: OF THAT PARTICULAR RESOLUTION, BUT NOT ANYTHING MORE THAN THAT.

THE COURT: AND YOU ARE SAYING THAT BASICALLY ANY COMMUNICATION FROM THE COMPUTER TO THE DISPLAY THAT WOULD RESULT IN A DISPLAY OF PIXELS IS--

MR. CAULEY: AND, YOUR HONOR, I WILL JUST NOTE BACK, AND I KNOW I'VE MENTIONED THIS NUMEROUS TIMES, BUT IN COLUMN 3, LINES 64, TO COLUMN 4 LINE 2, IT SAYS THE USB TO VGA CONVERTER CAN WORK WITH ANY COMPUTER SYSTEM RUNNING UNDER ANY OPERATION SYSTEMS.

IF HE HAD MEANT THAT THIS ONLY WORKED WITH A MONITOR THAT WAS GOOD TEN YEARS AGO, THEY WOULD HAVE SAID THAT. AND THIS IS -- THE INVENTOR IS DESCRIBING HIS INVENTION BROADLY THAT IT WILL WORK WITH ANY COMPUTER ANY OPERATING SYSTEM. AND THAT'S NOT -- AND I THINK WE ARE SUPPOSED TO BE FIGURING OUT WHAT THE INVENTOR'S INTENT WAS IN USING HIS TERM.

THE COURT: AND I APOLOGIZE FOR BEING DENSE, BUT BASICALLY IT SEEMS TO ME YOU ARE SAYING

THAT YOUR PATENT COVERS ANY CONVERTER THAT USES A USB BUS FOR THE PURPOSE OF -- OR THAT INVOLVES GETTING THE SIGNAL OR THE DATA FROM THE COMPUTER TO THE MONITOR, SUCH THAT A PICTURE WILL BE DISPLAYED.

MR. CAULEY: THAT'S CORRECT, YOUR HONOR.

AND TO GIVE REFERENCE TO THE TERM VGA, THAT IT IF IT WERE -- IF THERE WERE STANDARDS THAT COULD NOT BE DISPLAYED WITHOUT USING THIS TECHNOLOGY, WITHOUT USING THE VGA SOCKET, PLUG, CABLE, THEN I WOULD SAY THAT WOULDN'T BE COMPLIANT WITH THIS. IT WOULD HAVE TO BE ABLE TO BE TRANSMITTED FROM THE COMPUTER TO THE MONITOR BY USE OF VGA SOCKET, PLUG, CABLE. WHETHER OR NOT THAT'S BEING USED, IT'S -- THE VIDEO STANDARDS THAT ARE COMPLIANT WITH THAT TECHNOLOGY, WHATEVER RESOLUTION, WHATEVER IT'S CALLED.

THE COURT: OKAY. THEN I ASK: WHAT KIND OF PLUG OR SOCKET IS NEEDED TO GET THAT DATA FROM THE COMPUTER TO THE DISPLAY?

MR. CAULEY: WELL, IF YOU ARE USING THIS INVENTION, EXCEPT IN THE EMBODIMENT THAT COUNSEL NOTES IN FIGURE 6, THERE'S A VGA PLUG ON THE OTHER END. THERE'S A VGA SOCKET ON THE MONITOR AND IT PLUGS IN. THERE'S USB AT ONE END AND, VGA ON THE OTHER END, AND IT HAS THE 15-PIN PLUG THAT PLUGS

INTO THE MONITOR.

AND SO, THAT'S IN FACT, WHAT IT'S USING. IN THE EMBODIMENT IN FIGURE 6 YOU'VE GOT A USB AT BOTH ENDS BECAUSE THE INVERTER IS PHYSICALLY INSIDE THE MONITOR. BUT IT'S STILL THE SAME KIND OF SIGNALS, THEY COULD GO THROUGH USING THE 15-PIN.

THE COURT: THE ONE THAT'S INSIDE, DOES THAT USE PINS?

MR. CAULEY: IT DOESN'T USE PINS. IT DOESN'T KNOW WHETHER IT'S USING PINS OR NOT. IT'S COMPATIBLE WITH THE PLUG, SOCKET, CABLE THAT'S USING PINS. THE SIGNALS DON'T KNOW WHAT THEY ARE GOING THROUGH PINS OR NOT.

MR. YOON: JUST BRIEFLY, YOUR HONOR.

I THINK COUNSEL HAS ESTABLISHED WHY THEIR CONSTRUCTION IS INDEFINITE. IT COVERS ALL VIDEO STANDARDS THAT, THEORETICALLY, ARE COMPATIBLE WITH AN ALLEGED VGA PIN OR PLUG EVEN IF YOU DON'T USE IT.

SO IF YOU HAVE A STANDARD THAT SOMEONE COULD MAKE WORK WITH THE VGA PLUG, BECAUSE YOU DON'T HAVE TO USE IT FOR THE CLAIMS, THEY CLAIM IT'S COVERED.

THE REALTY IS, YOUR HONOR, IS THAT THEY DRAFTED THE PATENT. THEY SAID "VIDEO GRAPHICS

ARRAY." IT IS UNDISPUTED -- THIS PART IS COMPLETELY UNDISPUTED, AT LEAST ONE MEANING OF VIDEO GRAPHICS ARRAY IS THE IBM SPECIFICATION THAT SETS IT FORTH. THAT IS THE ORIGIN OF IT.

OTHER THAN THE TESTIMONY OF DR. MIN, WHICH COUNSEL SAID AT THE BEGINNING OF HIS OPENING REMARKS YOU SHOULDN'T GIVE WEIGHT TO EXPERT TESTIMONY -- OTHER THAN THE TESTIMONY OF DR. MIN, THEY DON'T HAVE ANY EVIDENCE, YOUR HONOR, THAT THE TERM, YOU KNOW, AT THE FILING DATE OF THE PATENT, THAT THE TERM "VIDEO GRAPHICS ARRAY" WOULD BE UNDERSTOOD BY A PERSON OF ORDINARY SKILL IN THE ART, TO MEAN EXTENDED GRAPHICS ARRAY.

IN FACT, YOUR HONOR, IT'S VERY CLEAR WHAT THEY ARE DOING. THEY ONLY TRY TO SAY THAT VGA MEANS SOMETHING. VGA SOMEHOW BECOMES A GENERIC TERM. BUT THE PATENT DIDN'T JUST SAY VGA, IT SAID VIDEO GRAPHICS ARRAY. AND THE ONLY EVIDENCE THEY ARE OFFERING IS THE RESULTS-ORIENTED EVIDENCE OF THEIR EXPERT.

AND THE OTHER THING I WOULD POINT OUT, YOUR HONOR, IT'S INTERESTING THE ONLY OTHER EVIDENCE THEY CAN FIND IS A 2008 WEBSITE SHOT WRITTEN BY SOMEONE FROM MARKETING WHO NEVER READ THE PATENT AND IS NOT A PERSON OF ORDINARY SKILL IN

THE ART.

THE REALTY IS THAT THE ONLY DOCUMENTED EVIDENCE AND THE UNDISPUTED TESTIMONY SHOWS THAT VIDEO GRAPHICS ARRAY WAS THE TECHNOLOGY CREATED BY IBM IT'S IN A SPECIFICATION OF 1991. THAT SPECIFICATION IS DATED AFTER SVGA AND XGA, AND THAT THE PURPOSE OF A PATENT IS TO PUT THE PUBLIC ON NOTICE AS TO THE BOUNDARIES OF THE CLAIMS.

AND I BELIEVE COUNSEL CLEARLY DEMONSTRATED THERE ARE NO BOUNDARIES TO WHAT THEY ARE TRYING TO CLAIM.

THE COURT: SO I TAKE IT YOU USE SVGA OR ONE OF THOSE IN YOUR PRODUCT, AND THEREFORE YOU DON'T FEEL YOU INFRINGE?

MR. YOON: WELL, YOUR HONOR, THERE ARE TWO ISSUES. MAYBE YOU HAVE A FLAT SCREEN TV AT HOME. THEY HAVE WHAT THEY CALL HDMI CONNECTORS. THE VGA CONNECTOR WAS AN ANALOG ONE.

SO THERE ARE TWO ISSUES HERE, YOUR HONOR. THE WAY THEIR CONSTRUCTION WORKS IS YOU DON'T HAVE TO USE THE VGA PLUG.

SECOND, YOUR HONOR, WE DO HAVE SOME PRODUCTS BUT NOT ALL PRODUCTS, THAT DO USE THE 15-PIN PLUG THAT THE PATENT HOLDER SAYS IS INFRINGING. BUT YOU CAN SEE WHAT THEY ARE TRYING

TO DO, THEY ARE TRYING REMOVE THE REQUIREMENT THAT YOU ACTUALLY USE THE 15-PIN PLUG. WE UNDISPUTEDLY USE PLUGS THAT ARE NOT VGA PLUGS; THEY ARE NOT THE 15-PIN PLUG

THE COURT: I TAKE IT YOU DON'T USE THE VGA STANDARD AS DEFINED BY IBM IN 1998 AND -- 1988 AND 1991.

MR. YOON: YOUR HONOR, TO BE VERY FAIR BECAUSE I AM MAKING A REPRESENTATION TO THE COURT, IT'S MY UNDERSTANDING THAT WE DO HAVE PRODUCTS THAT WILL SUPPORT THE ORIGINAL IBM SPEC DEPENDING ON WHICH TYPE OF DEVICE THEY'RE CONNECTING TO.

BUT, YOUR HONOR, I WOULD REALLY LIKE TO CHECK THAT WITH MY CLIENT. I DON'T WANT TO MISLEAD THE COURT. THAT'S BASED ON MY UNDERSTANDING, BUT I WOULD LIKE TO DOUBLE CHECK IF YOU WOULD LIKE.

THE COURT: NO, THAT'S ALL RIGHT. OKAY. LET'S MOVE ON.

MR. CAULEY: I DON'T THINK DISPLAY DEVICE IS GOING TO --

I THINK I ACTUALLY WANTED TO MENTION ONE THING ABOUT, WHICH IS PRETTY MUCH THE SAME POINT I WANTED TO MAKE WITH REGARD TO DISPLAY DEVICE, THAT COUNSEL MENTIONED VGA SIGNALS. AND WE, I THINK WITH REGARD TO DISPLAY DEVICE, I THINK WE ARE OKAY

WITH THEIR DEFINITION THAT VGA IS DEFINED THE WAY WE BELIEVE IT SHOULD BE DEFINED WHICH IS GENERICALLY.

SO I DON'T THINK THERE IS -- OTHER THAN THE DEFINITION OF VGA -- THERE'S REALLY THAT MUCH OF A DIFFERENCE BETWEEN THE TWO DEFINITIONS.

SO I THINK IN TERMS OF THE VGA SIGNALS, CERTAINLY OUR AGREEMENT TO THAT WAS DEPENDENT UPON OUR DEFINITION OF VGA BEING ACCEPTED.

SO THE WAY WE DEFINE VGA SIGNALS WAS VGA SIGNALS THAT WOULD COMPLY WITH THE GENERIC VIDEO STANDARDS. SO DISPLAY DEVICE, WE WOULD BE OKAY WITH ELECTRONIC DEVICE FOR VISUALLY REPRESENTING VGA SIGNALS IF VGA IS DEFINED THE WAY WE THINK IT SHOULD BE, WHICH IS GENERICALLY.

SO I THINK DISPLAY DEVICES DISPLAYING THOSE KINDS OF SIGNALS. I'M NOT SURE HOW MUCH OF A DISPUTE THERE IS ABOUT THIS TERM AS OPPOSED TO THIS IS REALLY ANOTHER ROUND OF VGA.

MR. YOON: YEAH I THINK, YOUR HONOR, THAT'S A FAIR ASSESSMENT.

THE ONE THING, YOUR HONOR, I KNOW FROM PREVIOUS DISCUSSIONS WITH THE COURT, YOU LIKE TO, IN THE CLAIM CONSTRUCTION, AT SOME POINT, ADDRESS THE ISSUES THAT REALLY MATTER FROM THE STANDPOINTS

OF INFRINGEMENT AND VALIDITY. AND WE ARE OF LIMITED TIME.

I BELIEVE FROM MY CLIENT'S STANDPOINT WE WOULD LIKE TO TALK ABOUT USB-BASED DISPLAY SIGNALS. THAT'S THE TERM WE WOULD LIKE TO ADDRESS NEXT BECAUSE WE ONLY HAVE ABOUT 15 MINUTES.

THE COURT: DO YOU AGREE THAT THAT'S ONE OF THE CRITICAL TERMS OR NOT? OR IS THERE ONE YOU ARE PARTICULARLY CONCERNED ABOUT?

MR. CAULEY: I THINK IF WE COULD GO THROUGH THEM, JUST TO NOTE, I THINK I CAN COVER THE NEXT TERMS PRETTY QUICKLY.

THE COURT: OKAY. GO FOR IT.

MR. CAULEY: I JUST WANTED TO FOR USB CONTROLLER, I THINK I STATE THIS PRETTY CLEARLY, THAT THE TERMS STORAGE, ROUTING, ENCODED, DON'T APPEAR ANYWHERE IN THE PATENT. THEY ARE TERMS THAT WERE MADE UP BY DR. JONES THAT THEY DON'T -- WE DON'T KNOW WHAT THEY MEAN. THEY ARE NOT ANYWHERE IN THE PATENT. WE WOULD HAVE TO, ESSENTIALLY, RE-MARKMAN THEM IF THEY WERE INCLUDED IN THE DEFINITION.

ENCODED IS NOT IN THE PATENT. THE TERM CONTROL IS PULLED OUT OF THE TERM CONTROLLER. IT DOESN'T DESCRIBE -- IT DOESN'T DESCRIBE WHAT THEY

DO. BASICALLY, THE ONLY THING THE USB CONTROLLER DOES IS IT CONNECTS TO USB PORT, ISSUES A BUS CONTROL COMMAND, SENDS A USB-BASED DISPLAY SIGNAL TO THE BRIDGE.

YOU KNOW, THAT'S ALL IT DOES. IT DOESN'T DO ANY OF THESE OTHER THINGS. IT ISN'T LIMED TO A DEVICE THAT -- CONTROL, RECEIPT, STORAGE ROUTING, ENCODED. THOSE TERMS AREN'T IN THE PATENT; WE DON'T THINK THEY BELONG IN THE DEFINITION.

MR. YOON: YOUR HONOR, COULD I HAVE SLIDE 37 ON THE SCREEN. A COUPLE OF THINGS YOUR HONOR.

FIRST OF ALL, COUNSEL SEEMS TO MAKE A BIG DEAL ABOUT CERTAIN TERMS NOT APPEARING IN THE PATENT. THEIR CONSTRUCTION COMMUNICATES THAT WORD DOESN'T APPEAR IN THE PATENT EITHER.

THE ISSUE YOUR HONOR, IS WHAT'S CONSISTENT WITH THE LANGUAGE OF THE CLAIMS AND THE SPECIFICATIONS. AND IT IS VERY CLEAR THAT THE TERMS ROUTING, STORAGE AND RECEIPT, ARE BASED ON THE CLAIMS AND SPECIFICATIONS OF THE '788 PATENT THEY PROVIDE CLARITY AS TO WHAT FUNCTION HAPPENS IN A USB CONTROLLER.

MR. YOON: BILL, COULD I HAVE THE LANGUAGE OF CLAIM 1 ON THE SCREEN, WHICH IS SLIDE 39.

YOUR HONOR, CLAIM 1 CITES A USB CONTROLLER. THAT CONTROLLER'S FIRST FUNCTION IS TO RECEIVE EXCLUSIVELY THERE THROUGH USB-BASED DISPLAY SIGNALS. SO THE FIRST FUNCTION IS THAT IT RECEIVES THE USB-BASED DISPLAY SIGNALS. THEN THE USB CONTROLLER ISSUES A BUS CONTROL COMMAND. THE BUS CONTROL COMMAND IS WHAT YOU USE TO PASS INFORMATION ON. AND THEN AFTER IT ISSUES THE BUS CONTROL COMMAND, THE USB CONTROLLER PROVIDES THE DATA, USB-BASED DISPLAY SIGNALS, TO THE BRIDGE.

SO THE FIRST FUNCTION OF THE USB CONTROLLER THAT IT ENGAGES IN ROUTING. THAT'S IN THE PLAIN LANGUAGE OF THE CLAIM. IT GETS IT FROM THE HOST COMPUTER. IT THEN CONTROLS THE ROUTING BY ISSUING THE BUS CONTROL COMMAND, AND THEN IT FORWARDS IT TO THE BRIDGE.

IN RESPONSE TO A SIGNAL FROM THE BRIDGE, WHICH IS A FIRST IN FIRST OUT SIGNAL. AS YOUR HONOR KNOWS AND IT'S UNDISPUTED THAT FIRST-IN FIRST-OUT IS SOMETIMES REFERRED TO AS FIFO. FIFO IS A STORAGE CONCEPT. SO WHAT HAPPENS IN THE PLAIN LANGUAGE OF THE CLAIM IS THAT THE USB CONTROLLER RECEIVES THE DISPLAY SIGNAL. IT HOLDS IT, STORES IT, UNTIL IT GETS THE FIFO CONTROL SIGNAL FROM THE BRIDGE, AT WHICH TIME IT THEN FORWARDS THE SIGNAL

TO THE BRIDGE. SO WE'VE SEEN ROUTING AND WE'VE SEEN STORAGE, AND NOW LET'S TAKE A LOOK AT ENCODING.

NOW, MCT SEEMS TO MAKE A BIG DEAL -- IF I COULD HAVE MCT SLIDE 16, WHICH WAS THE SLIDE THAT COUNSEL JUST SHOWED WHERE HE KEPT SAYING ENCODING IS NOT IN THE '788 PATENT. BUT YOUR HONOR HEARD ON THE STAND -- IF I COULD HAVE DR. MIN'S DEPOSITION TESTIMONY AT 162 -- THIS IS VOLUME 1, YOUR HONOR, LINES 2 TO 14.

"QUESTION: DO YOU HAVE AN UNDERSTANDING OF WHAT USB BASED DISPLAY SIGNALS MEANS?

"ANSWER: OH, SURE. YEAH. I MEAN, YOU KNOW, USB-BASED IN THIS CASE IS LIKE WHAT DR. JONES, OUR EXPERT, SAID. IT WOULD BE THE DATA THAT CAN BE COMMUNICATED OVER THE USB INTERFACE. SO THE SIGNAL HAS TO BE ENCODED ACCORDING TO THE USB STANDARD."

AND DR. MIN CONFIRMED THAT A USB-BASED DISPLAY SIGNAL, WHICH THE CLAIM TALKS ABOUT, IS A USB ENCODED SIGNAL.

MR. YOON: IF I COULD HAVE SLIDE 57 ON THE SCREEN.

YOUR HONOR, THIS IS PARAGRAPH 46 OF DR. JONES' DECLARATION.

"ANY SIGNAL PASSED THROUGH A USB PORT OF A COMPUTER THAT IS NOT USB ENCODED, WOULD BE MORE THAN LIKELY BE UN-USEABLE BY THE RECEIVING PROCESSES."

IT'S UN DISPUTED BY THE EXPERTS IN THIS CASE, YOUR HONOR, THAT A USB BASED DISPLAY SIGNAL IS, IN FACT, A USB ENCODED SIGNAL.

SO BILL, IF I COULD HAVE SLIDE 39 ON THE SCREEN.

SO WITHOUT EVEN LEAVING CLAIM 1, YOUR HONOR, WE SEE HOW THE USB CONTROLLER ROUTES THE USB-BASED DISPLAY SIGNAL, WHICH IS A USB ENCODED SIGNAL, FROM THE HOST COMPUTER TO THE BRIDGE, AND IT DOES SO IN RESPONSE TO THE FIFO COMMAND WHICH INDICATES THAT THE USB CONTROLLER IS STORING IT. IT'S FOUND RIGHT IN THE LANGUAGE OF THE CLAIMS AND THAT THE TERM HAS BEEN CONFIRMED BY MCT'S OWN EXPERT.

IF I COULD HAVE SLIDE 42 ON THE SCREEN. OH, ACTUALLY, WHY DON'T WE SKIP THAT ONE WE DON'T HAVE MUCH TIME. GO TO SLIDE 43.

YOUR HONOR, THE OTHER ISSUE IS IF YOU LOOK AT THE CONSTRUCTION THAT MCT HAS, IT'S ANOTHER ATTEMPT TO COVER ANYTHING AND BROADEN THE CLAIM.

MCT SAYS THE USB CONTROLLER IS ANYTHING

THAT COMMUNICATES WITH THE HOST AND COMMUNICATES WITH THE BRIDGE. IT BASICALLY TAKES THE WORD "CONTROLLER" OUT OF "USB CONTROLLER." A CONTROLLER IS AN ACTIVE DEVICE THAT CONTROLS. THAT'S WHY IT'S CALLED THE CONTROLLER. AND IT CONTROLS THE ROUTING, STORAGE OF THE INFORMATION. AND THIS WAS CONFIRMED BY DR. MIN AT HIS DEPOSITION AT VOLUME 2, PAGE 235, LINES 6 TO 11.

DR. MIN AGREED THAT SOMEONE IN THE ORDINARY SKILL IN THE ART WOULD TYPICALLY CONSIDER A CONTROLLER TO BE ACTIVE DEVICE, SOMETHING THAT CONTROLS SOMETHING, AS OPPOSED TO A PASSIVE ONE

MR. YOON: THANK YOU, YOUR HONOR.

THE COURT: IF I UNDERSTAND IT CORRECTLY, WHY WOULDN'T A USB CONTROLLER BE A CONTROLLER THAT RECEIVES A USB DISPLAY SIGNAL, HOLD IT UNTIL IT RECEIVES A COMMAND AND THEN ISSUES -- UNTIL IT RECEIVES A COMMAND, A BUS CONTROL COMMAND, AND THEN FORWARD ITS OUT ON A FIFO BASIS?

MR. YOON: I THINK, YOUR HONOR, THAT'S WHAT THE CLAIM REQUIRES. WE DON'T HAVE A DISPUTE WITH THAT, PROVIDED IT'S ACTUALLY A CONTROLLER. IT'S DOING THE CONTROL FUNCTION.

WHAT THE PLAINTIFF WANTS TO DO IS REMOVE THE WORD "CONTROL" FROM "CONTROLLER" AND SAY,

ANYTHING THAT I CAN SAY RECEIVES SOMETHING OR SOMEHOW PASSES IT ON CONSTITUTES A CONTROLLER. SO I THINK THAT'S THE KEY DIFFERENCE, BUT FROM A FUNCTION STANDPOINT, YOUR HONOR, I AGREE WITH YOU. BUT THE KEY POINT IS A USB CONTROLLER IS ACTIVE DEVICE. IT IS A CONTROLLER, AS OPPOSED TO SOMETHING THAT MERELY COMMUNICATES.

THANK YOU, YOUR HONOR.

THE COURT: ANYTHING FURTHER YOU WANT TO SAY ON THAT?

MR. CAULEY: YOUR HONOR, I THINK WE ARE PRETTY MUCH OKAY WITH WHAT YOU SAID.

I THINK A USB CONTROLLER IS ADEQUATELY DESCRIBED IN THE CLAIM AS TO WHAT IT DOES. SO, AGAIN, PRETTY MUCH FOLLOW THE LANGUAGE OF THE CLAIM.

THE COURT: YOU ARE MORE CONCERNED WITH HIS USE OF TERMS LIKE "ENCODED"?

MR. CAULEY: YES, YOUR HONOR.

THE COURT: NOT KNOWING WHAT THOSE MEAN FOR SURE.

MR. CAULEY: YES.

THE COURT: OKAY.

MR. CAULEY: YOUR HONOR, I AM WILLING TO SKIP OVER VGA CONTROLLER AND USB DISPLAY SIGNAL.

THE ONE I'M CONCERNED ABOUT IS THE ONE AFTER THE ONE THAT MR. YOON WANTS WHICH IS THE "FOR RECEIVING EXCLUSIVELY THERETHROUGH USB BASED DISPLAY SIGNALS." SO I THINK IF WE COULD DO THOSE TWO.

THE COURT: MR. YOON, YOU COULD GO FIRST THEN AND WE WILL GO WITH YOURS.

MR. YOON: WE'VE HAD THE ORDER, COUNSEL GOES FIRST. WE CAN END IT AFTER THESE TWO TERMS, YOUR HONOR, IT WOULD BE FINE WITH US.

MR. CAULEY: IT WOULD BE FINE WITH US.

SO WE WILL JUST DO -- DO YOUR NEXT ONE

MR. CAULEY: SO, SLIDE 22. AND I THINK IF YOU COULD JUST GO BACK TO SLIDE 20, BECAUSE BASICALLY WHAT WE HAD WAS USB-BASED DISPLAY SIGNALS. AND SO WE HAVE USB SIGNALS HANDLING DISPLAY INFORMATION AND THEN ALL WE DID WAS -- GO TO 22 -- WAS ADD "FROM THE COMPUTER" TO THAT.

WHAT DISPLAYLINK DID WAS, AGAIN, IMPORT TERMS THAT I DON'T QUITE KNOW WHAT THEY MEAN. REPRESENTING THE IMAGE RENDERED BY THE COMPUTER. THERE IS NO TERM "RENDERED BY THE COMPUTER" IN THE PATENT THAT -- I DON'T KNOW WHAT IT MEANS. I THINK IF THE COURT WERE TO USE THAT WE WOULDN'T KNOW WHAT IT MEANT LATER.

I THINK IN THEIR PRESENTATION, IN THEIR

SLIDES, THEY REVISED THAT TO USE THE TERM "MAY HAVE BEEN GENERATED," MEANING THAT IT WAS RENDERED, MEANING IT WAS GENERATED FROM THE COMPUTER.

AND I DON'T HAVE ACCESS TO THEIR SLIDES -- I WOULD LIKE SLIDE 60.

MR. YOON: COULD YOU PUT SLIDE 60 ON THE SCREEN, BILL.

MR. CAULEY: I THINK THAT'S THE DISPUTE HERE, WHETHER THE IMAGE TO BE DISPLAYED MUST BE RENDERED BY THE COMPUTER OR WHETHER THE IMAGE COULD BE GENERATED SOMEWHERE ELSE.

AND MY UNDERSTANDING OF WHERE THEY ARE GETTING THAT FROM IS -- I THINK THIS IS SOMETHING WE SAW BEFORE WHICH IS FIGURE 4. FIGURE 4, IN FACT, DOES DESCRIBE A GRAPHICS ENGINE INSIDE THE COMPUTER GENERATING AN IMAGE, AND WE DON'T DISPUTE THAT. THAT THAT'S ONE OF THE EMBODIMENTS OF THE INVENTION. BUT THAT'S NOT THE ONLY EMBODIMENT OF THE INVENTION. THIS IS A CLASSIC READING OF THE SPECIFICATION INTO THE CLAIMS.

WHAT THE CLAIM SAYS IS THAT IN THE SUMMARY OF THE INVENTION, WHICH TALKS ABOUT THE IMAGE, COLUMN 1, LINE 35 TO 36, TALKS ABOUT DISPLAY DEVICE WHERE THE IMAGE TO BE DISPLAYED CAN BE TRANSMITTED FROM THE HOST COMPUTER IN USB FORM. IT

DOESN'T TALK ABOUT WHERE THE IMAGE COMES FROM. AND I'M NOT SURE WHERE COUNSEL IS GOING WITH THIS ON AN INFRINGEMENT BASIS, BUT THERE IS NOTHING IN THE CLAIMS -- THERE IS NOTHING IN THE SPEC THAT TALKS ABOUT WHERE THE IMAGE COMES FROM. THIS TALKS ABOUT THE IMAGE COMING FROM THE COMPUTER, BUT IT DOESN'T SAY WHERE THE IMAGE STARTED OUT.

YOU COULD, THEORETICALLY, HAVE AN IMAGE. YOU COULD HAVE A VIDEO CAMERA THAT WAS ATTACHED TO THE COMPUTER THAT WAS ATTACHED TO THE MONITOR THROUGH THIS INVENTION. AND I GUESS FROM DISPLAYLINK'S PERSPECTIVE THAT WOULDN'T INFRINGE.

THERE'S NOTHING IN THE PATENT, OTHER THAN ONE OF THE SPECIFIED EMBODIMENTS IN FIGURE 4, THAT TALK TALKS ABOUT WHERE THE IMAGE IS GENERATED. YOU KNOW, CERTAINLY, IF IT WAS GENERATED INSIDE THE COMPUTER, I WOULD SAY THAT WOULD INFRINGE, THAT'S ONE OF THE EMBODIMENTS, BUT THERE'S NOTHING IN THE PATENT THAT LIMITS IT TO THAT.

I THINK THAT'S THE REAL PROBLEM WITH THEIR DEFINITION. AND I THINK IF I UNDERSTAND THE TERM "RENDERING" AS GENERATING, I THINK THERE'S NOTHING IN THE PATENT THAT RESTRICTS THAT CLAIM TO BEING A SITUATION WHERE THE IMAGE HAS TO HAVE BEEN GENERATED BY THE COMPUTER. AND I THINK THAT'S

REALLY MY UNDERSTANDING OF WHAT THE DISPUTE IS.

THE COURT: SO INSTEAD OF RENDERED, IT SAID, COMING FROM, YOU WOULD BE FINE.

MR. CAULEY: COMING FROM, IF IT DIDN'T RESTRICT IT TO WHERE IT STARTED OUT. THAT'S ESSENTIALLY WHAT THEY ARE SAYING IS THAT THE IMAGE HAS TO START OUT IN THE COMPUTER. AND I'M NOT EVEN SURE WHAT THAT MEANS BECAUSE LIKE I SAID, IF I'VE GOT ON I VIDEO CLIP FROM CNN RUNNING FROM A WEB PAGE, WHERE IS THAT IMAGE GENERATED? IS IT GENERATED IN A CAMERA IN BAGHDAD COMING THROUGH ATLANTA COMING THROUGH MY COMPUTER OR WHAT?

I THINK IT'S REALLY UNCLEAR, IT'S HARD TO FIGURE OUT WHAT THEY ARE TALKING ABOUT, WHERE THIS IMAGE WOULD BE GENERATED. BUT THERE'S NOTHING IN THE CLAIM, THERE'S NOTHING IN THE SPEC THAT REQUIRES IT. IT SIMPLY HAS TO COME FROM THE COMPUTER. WHERE IT STARTED OUT, THE CLAIM DOESN'T TALK ABOUT IT OF.

AND IF I UNDERSTAND THEIR ARGUMENT CORRECTLY, I THINK THAT'S WHAT OUR POSITION IS.

MR. YOON: YOUR HONOR, COUNSEL MISSTATES OUR ARGUMENT.

A COUPLE OF THINGS, YOUR HONOR, BEFORE WE GET TO THE ISSUE.

BILL, IF I COULD HAVE JUST DR. MIN'S DEPOSITION TESTIMONY AT VOLUME 1, 162, LINES 2 TO 14.

AND THAT WAS THE TESTIMONY, YOUR HONOR. IT'S UNDISPUTED BY BOTH EXPERTS IN THIS CASE, FIRST ALL, BECAUSE WE ARE GETTING TO THE "FROM THE COMPUTER" PART, BUT SETTING UP THE BACKGROUND. IT'S UNDISPUTED THAT THE A USB-BASED DISPLAY SIGNAL IS A USB ENCODED SIGNAL.

AND BILL, IF YOU COULD PUT ALSO SLIDE 57 UP WHICH IS WHAT WE LOOKED AT BEFORE IN PARAGRAPH 46 WHERE DR. JONES EXPLAINED WHY IT NEEDED TO BE A USB ENCODED SIGNAL SO THAT IT COULD BE USED.

NOW, GOING TO SLIDE 60, PLEASE.

YOUR HONOR, THE KEY HERE IS, YOUR HONOR, WHEN COUNSEL TALKS HE SAYS NOTHING IS IN THE CLAIMS AND NOTHING IS IN THE SPECS, BUT HE NEVER SHOWED YOU THE CLAIMS OR THE SPECS.

DISPLAYLINK'S CONSTRUCTION IS FULLY SUPPORTED BY THE PATENT. WE SAY USB ENCODED SIGNALS REPRESENTING THE IMAGE RENDERED BY THE COMPUTER. IN OUR BRIEFING TO YOU, YOUR HONOR, YOU SAID "RENDERED BY THE COMPUTER" MEANS THAT THE COMPUTER DISPLAYS THE IMAGE THAT IT WANTS DISPLAYED ON THE SCREEN AND THEN IT SENDS IT OVER THE

CONNECTION TO BE DISPLAYED TO THE SCREEN. THAT'S WHAT "FROM THE COMPUTER" MEANS, THAT THE IMAGE THAT WAS GENERATED THAT SENT AS A USB-BASED DISPLAY SIGNAL COMES FROM THE COMPUTER. THE COMPUTER SAYS, THIS IS WHAT I WANT TO SHOW ON THE SCREEN.

AND HERE'S A KEY ISSUE, YOUR HONOR. IN THE PARTIES PAPERS -- MCT MADE A BIG DEAL. WELL, FOR EXAMPLE, A JPEG FILE, FOR EXAMPLE, WOULD NOT BE CONSIDERED AN IMAGE BY DR. JONES, AND I THINK THAT'S A KEY POINT.

A JPEG FILE OR AN MPEG FILE THAT I JUST TRANSMIT TO STORE ON MY DISK DRIVE AND I DON'T TURN INTO AN IMAGE, NO, THAT'S NOT AN IMAGE AND THAT'S NOT A DISPLAY SIGNAL. AND THAT'S WHAT'S WRONG WITH THEIR DEFINITION.

THEY SAY DISPLAY INFORMATION, AS OPPOSED TO THE ACTUAL IMAGE BEING GENERATED, AND THAT IS WHAT'S CLEAR FROM THE CLAIMS AND THE SPECIFICATION.

BILL, IF I COULD HAVE SLIDE 62 WHICH IS THE LANGUAGE OF THE CLAIM.

YOUR HONOR, THE CLAIM BEGINS THAT THIS IS A USB TO VGA CONVERTER, INTERCONNECTING THROUGH A USB PORT OF A COMPUTER, A DISPLAY DEVICE CONTROLLED BY THE COMPUTER. SO THE PURPOSE OF THIS DEVICE IS TO TAKE A USB-BASED DISPLAY SIGNAL, CONVERT IT INTO

A VGA DISPLAY SIGNAL THAT WILL THEN BE SHOWN ON THE DISPLAY DEVICE CONNECTED BY THE COMPUTER. SO THE COMPUTER CREATES AN IMAGE AND SAYS, I WANT IT ON THE SCREEN.

AND THAT'S WHAT THE CLAIM TALKS ABOUT HERE. BASICALLY, YOU HAVE A USB CONTROLLER DISPOSED EXTERNAL TO THE COMPUTER AND ADAPTED TO DETACHABLY CONNECT TO A USB PORT OF THE COMPUTER FOR RECEIVING EXCLUSIVELY THERETHROUGH USB-BASED DISPLAY SIGNALS FROM THE COMPUTER.

SO WHAT DOES THE CLAIM SAY THAT'S SET BY THE COMPUTER? USB-BASED DISPLAY SIGNALS. AND WHAT HAPPENS TO THOSE SIGNALS, YOUR HONOR? WHAT HAPPENS IS THOSE SIGNALS ARE CONVERTING THE USB-BASED DISPLAY SIGNALS INTO THE CORRESPONDING VGA SIGNALS AND FORWARDING THE VGA SIGNALS TO THE VGA CONTROLLER WHICH APPLIES THOSE SIGNALS TO THE DISPLAY DEVICE.

SO THERE'S A DIRECT CONVERSION FROM THE SIGNAL RECEIVED FROM THE COMPUTER INTO THE SIGNAL UNDERSTOOD BY THE DISPLAY DEVICE. THAT'S WHAT THE CLAIM IS TALKING ABOUT.

AND IF YOU GO TO THE NEXT SLIDE WHICH IS SLIDE 64.

THE COURT: LET ME STOP YOU FOR A MOMENT.

I TAKE MY DIGITAL CAMERA AND LOAD THE PICTURES ONTO MY COMPUTER

MR. YOON: YES, YOUR HONOR.

THE COURT: AND I LOOK AT THEM ON THE COMPUTER.

MR. YOON: OKAY.

THE COURT: HAVE I DONE WHAT YOU ARE TALKING ABOUT, OR NOT?

MR. YOON: YES, YOUR HONOR, BUT LET'S BE CLEAR. WHEN YOU DID IT, BECAUSE I THINK THAT'S THE NUB OF THE DISPUTE, YOU HAVE ON YOUR COMPUTER YOUR "MY PICTURES." YOU GO TO WINDOWS, YOU CLICK "MY PICTURES," AND THEN IT OPENS UP.

THE COURT: RIGHT.

MR. YOON: AND IT CREATES THE IMAGE. THAT IMAGE IS CREATED BY THE COMPUTER AND THEN SENT OVER THE CABLE AND SHOWN ON YOUR MONITOR.

THE COURT: RIGHT.

MR. YOON: WE WOULD SAY THAT THAT'S WHAT WE MEAN BY RENDERED BY THE COMPUTER, SAYING, HERE'S THE INSTRUCTIONS FOR SHOWING IT ON THE SCREEN; THAT'S WHAT WE SAY. THEY SAY IT'S SOME DISPLAY INFORMATION. THAT'S WHAT THE FUNDAMENTAL RUB IS.

AND IF YOU GO BACK, BILL, TO SLIDE 60.

THE TERM "FROM THE COMPUTER" HAS TO HAVE

SOME MEANING. INSTEAD OF ACTUALLY TELLING YOU WHAT IT MEANS, YOUR HONOR, THEY JUST ADD IT TO THE END. THEY JUST GO FROM THE COMPUTER THERE.

THEY IGNORE THE CLAIM AND THEY IGNORE THE SPECIFICATION. THE CLAIMS AND THE SPECIFICATION MAKE VERY CLEAR, YOUR HONOR, WHAT THAT IS, IS THAT THE COMPUTER GENERATES THE IMAGE TO BE DISPLAYED BY THE MONITOR THAT'S SENT OVER THE USB.

THE COURT: WITH MY PICTURE EXAMPLE, TELL ME WHAT WOULD NOT BE -- WHAT WOULD NOT MEET THIS LANGUAGE.

MR. YOON: THE JPEG FILE ITSELF, IN UNOPENED FORM, WOULD NOT MEET THAT LANGUAGE BECAUSE IT'S NOT AN IMAGE TO BE DISPLAYED, YOUR HONOR.

THE COURT: IT'S NOT AN IMAGE BECAUSE?

MR. YOON: IT'S NOT OPENED UP. IT HASN'T BEEN CREATED BY THE COMPUTER. YOU STORE A FILES -- FOR EXAMPLE, I STORE A JPEG FILE AND IT'S STORED IN JPEG FORMAT. AND THEN MY COMPUTER'S OPERATING SYSTEM OR DRIVER HAS A PROGRAM FOR CONSTRUCTING FROM THAT FILE, AN ACTUAL IMAGE.

THE IMAGE WHICH THEN IS -- BILL IF YOU COULD SHOW FIGURE 4.

THE COURT: SO IF I JUST GOT A LIST OF MY JPEG FILES --

MR. YOON: RIGHT.

THE COURT: -- AND THAT SHOWED UP ON THE SCREEN, THAT WOULD OR WOULD NOT BE.

MR. YOON: WELL, WHAT'S ON YOUR SCREEN IS OBVIOUSLY AN IMAGE, YOUR HONOR, BUT THE REFERENCE TO THE FILES ITSELF, THE FILES THAT ARE STILL RESIDING ON YOUR HARD DRIVE OR SOMETHING, THAT WOULD NOT BE DISPLAY INFORMATION. THAT WOULD NOT BE A USB ENCODED DISPLAY SIGNAL IN LIGHT OF THE PATENT. IT WOULD HAVE TO BE WHAT'S ACTUALLY DISPLAYED BY THE MONITOR. THE COMPUTER GENERATES AN IMAGE, A PICTURE OF WHAT WOULD BE DISPLAYED, AND THEN IT'S TRANSMITTED BY THE USB.

SO THAT IS WHAT WE SAY CLEARLY IS "FROM THE COMPUTER" MEANS, THAT THE IMAGE TO BE SHOWN ON THE MONITOR WAS GENERATED OR RENDERED BY THE COMPUTER.

AND THEN BILL, IF YOU COULD PUT FIGURE 4 ON THE SCREEN, PLEASE.

JUST TO GIVE YOU AN EXAMPLE, YOUR HONOR,

SO YOUR HONOR, YOU SEE THAT THE PATENT -- THIS IS THE ONLY DISCLOSURE IN THE PATENT -- IS THAT THE APPLICATION, THIS IS YOUR JPEG FILE, YOUR HONOR, SAYS, I WANT TO REQUEST A DISPLAY; I WANT TO SHOW A PICTURE OF ONE OF MY THREE

DAUGHTERS, FOR EXAMPLE, YOUR HONOR. THEN THE HOST COMPUTER NEGOTIATES THE DISPLAY CONTROL FUNCTION THEN THE GRAPHIC ENGINE GETS STARTED. THE GRAPHIC DRIVER THEN GETS STARTED SO THAT, VIRTUALLY, IN THE MEMORY OF THE COMPUTER YOUR HONOR, IS THE PICTURE THAT WILL BE DISPLAYED ON THE SCREEN. THAT PICTURE IS TRANSMITTED VIA THE USB INTERFACE. THIS IS THE ONLY DISCLOSURE IN THE PATENT.

THE COURT: OKAY. SORRY TO BE DENSE AGAIN, BUT LET'S ASSUME THAT I DON'T WANT TO LOOK AT THE PICTURE OF MY DAUGHTER, BUT I JUST WANT TO FIND OUT IF -- I CAN'T REMEMBER WHETHER I LOADED IT INTO MY COMPUTER OR NOT, SO ALL I WANT TO DO IS LIST WHAT I GOT.

MR. YOON: RIGHT. WE WOULD SAY THAT THAT WOULD CERTAINLY NOT BE A USB-BASED DISPLAY SIGNAL BECAUSE ALL THAT IS, IS INDEXING INFORMATION THAT SOME OTHER SOFTWARE APPLICATION OF THE COMPUTER GENERATES INTO AN IMAGE.

BUT YOUR HONOR, I THINK WE CAN CRYSTALIZE WHAT THE DISPUTE ULTIMATELY IS BETWEEN THE PARTIES.

THE ISSUE HERE IS: DOES THE CLAIM "FROM THE COMPUTER" REQUIRE THE ACTUAL IMAGE TO BE GENERATED BY THE COMPUTER OF WHICH, AS YOU SAW WITH DR. MIN, THAT MEANS IT CAN'T BE XGA OR SVGA BECAUSE

YOU NEED SOME TYPE OF COMPRESSION OR SOME TYPE OF OTHER PROGRAM. IT'S JUST NOT ENOUGH BANDWIDTH IN THE USB PLUG.

OR IF SOMEWHERE DOWN THE ROAD, THE USB CABLE TRANSMITS SOME INFORMATION -- LET'S SAY PART OF THE FILE, THE FILE YOU TALKED ABOUT YOUR HONOR, WAS TRANSMITTED TO AN INTERMEDIATE DEVICE, AND THAT INTERMEDIATE DEVICE GENERATED THE IMAGE, AND THEN THAT WAS THEN FORWARDED TO A VGA MONITOR, RIGHT? LET'S SAY THEY HAVE SOME INTERMEDIATE COMPUTER OR PROCESSOR. THEY WOULD SAY THAT FALLS WITHIN THE SCOPE OF THE CLAIM. WE SAY IT WOULD NOT, YOUR HONOR

THE COURT: OKAY. I WILL LET YOU GO.

I THINK 22 MINUTES BEYOND WHEN I SAID I WOULD SHUT OFF, BUT YOU HAVE ONE MORE YOU WANTED TO COVER?

MR. CAULEY: I JUST WANTED TO COVER IT ORALLY. I DON'T THINK IT WILL TAKE MORE THAN A COUPLE OF MINUTES, IT'S MORE OF A GRAMMATICAL ISSUE.

MR. CAULEY: WE WILL FINISH THIS IN THREE MINUTES.

SLIDE 23. THIS IS REALLY A GRAMMATICAL ISSUE. THIS IS THE ISSUE OF WHETHER THE -- THIS IS

DESCRIBING THE USB CONTROLLER -- IT'S WHETHER THE ONLY SIGNALS THAT COULD GO THROUGH A USB CONTROLLER ARE USB-BASED DISPLAY SIGNALS, OR WHETHER THE USB DISPLAY SIGNALS CAN'T GO ANY PLACE ELSE OTHER THAN THROUGH A USB CONTROLLER.

SO BASICALLY, I THINK THE WAY THAT WE READ IT I THINK IS, YOU KNOW, CERTAINLY GRAMMATICALLY THE WAY THE SENTENCE IS SET UP, IS THAT A USB CONTROLLER -- DISPOSED EXTERNAL TO THE COMPUTER AND ADAPTED DETACHABLY CONNECTED TO THE USB PORT OF THE COMPUTER FOR RECEIVING EXCLUSIVELY THERETHROUGH USB-BASED DISPLAY SIGNALS.

AND I THINK WHAT THEY WANT IS THEY WANT TO SWITCH AROUND EXCLUSIVELY AND THERETHROUGH. THEY REALLY WANT TO MAKE IT FOR RECEIVING THERETHROUGH EXCLUSIVELY USB-BASED DISPLAY SIGNALS. AND IF IT READ THAT WAY, I WOULD AGREE WITH THEM. THEY WANT TO MAKE IT THAT THE ONLY THING THAT COULD GO THROUGH THE USB CONTROLLER IS EXCLUSIVELY USB-BASED DISPLAY SIGNALS, NOTHING ELSE

THE COURT: THIS MAY BE PRETTY WELL COVERED IN THE BRIEFS.

MR. CAULEY: AND THAT'S PRETTY WELL COVERED IN THE BRIEF, BUT THIS IS ONE WAS IMPORTANT TO US AND SO I JUST WANTED TO -- I DON'T THINK MY

SWITCHING OF THE TERMS WAS QUITE COVERED IN THE BRIEFS; I WANTED TO MAKE THAT DISTINCTION.

MR. YOON: LITERALLY, I WILL TRY TO KEEP IT TO A MINUTE. I JUST WANTED TO PUT ON THE SCREEN, SLIDE 73.

AND BILL, WOULD YOU BLOW UP THE BIG PART.

THE KEY ISSUE HERE, YOUR HONOR, IS THAT THIS LANGUAGE EXCLUSIVELY THERETHROUGH WAS ADDED DURING THE PROSECUTION OF THE PATENT IN THE MAY 2006 AMENDMENT. AND THE KEY ASPECT HERE, YOUR HONOR, IS THAT THEY ADDED THE PHRASE "THROUGH A USB PORT," AND THEN THEY ADDED ALSO THE PHRASE "EXCLUSIVELY THERETHROUGH."

YOU COULD SHUT IT OFF, BILL. WE ARE ON LIMITED TIME.

THIS CLAIM, YOUR HONOR, IS DIRECTED TO USB TO VGA CONVERTER. IT'S DESIGNED TO CONNECT TO A DISPLAY DEVICE. AS YOU WILL SEE IN THE PAPERS YOUR HONOR, AND WHAT DR. MIN ADMITTED, IS THAT ALL THE SIGNALS ALREADY GO THROUGH THE USB CONNECTOR. THE MEANING "EXCLUSIVELY THERETHROUGH" WAS DIRECTED TO THE FUNCTION AND PURPOSE OF THE DEVICE WHICH WAS TO PROVIDE USB DISPLAY SIGNALS TO A DISPLAY DEVICE. AND EXCLUSIVELY THERETHROUGH WAS ADDED TO INDICATE THAT THE CONVERTER EXCLUSIVELY RECEIVED DISPLAY

SIGNALS. AND SO THAT WAS THEN PROVIDED TO THE DISPLAY DEVICE.

THE COURT: WHY WOULD THAT BE IMPORTANT?

MR. YOON: YOUR HONOR, I DON'T KNOW PLAINTIFF'S THEORY ON THAT, BUT I BELIEVE THAT HE IDENTIFIED IT AS IMPORTANT. I IDENTIFIED THE OTHER ONE AS IMPORTANT.

THE COURT: WHY IS IT IMPORTANT THAT IT BE EXCLUSIVELY?

MR. YOON: TWO THINGS, YOUR HONOR.

ONE IS THAT THIS INVENTION IS DIRECTED TO -- AND I THINK WHAT ACTUALLY SUMS IT UP IS THAT WHEN MY PARTNER, MS. SHANBERG, PUT UP THE TUTORIAL WHERE SHE SHOWED THE HUB, AND THE HUB CONNECTED TO A LOT OF DIFFERENT PERIPHERALS, YOU SAW THAT IN THE PICTURE, AS OPPOSED TO WHAT THIS PATENT IS DIRECTED TO WHICH IS A USB TO VGA, A 1 TO 1 CONVERSION WHERE YOU SEND ONLY DISPLAY SIGNALS THROUGH. I THINK THAT MUST BE THE LEVEL OF CONCERN ON THE PART OF THE PLAINTIFF. THEY WANT TO COVER THESE BIGGER HUBS AS OPPOSED TO AN ACTUAL USB TO VGA CONVERTER.

THE COURT: OKAY. THANK YOU.

MR. YOON: THANK YOU, YOUR HONOR.

MR. CAULEY: THANK YOU, YOUR HONOR.

THE COURT: YOU ARE FREE.

MR. YOON: THANK YOU.

THE COURT: I AM REFERRING TO THE REPORTER.

YOU'RE FREE TOO.

MR. CAULEY: THANK YOU, YOUR HONOR.

THE COURT: YOU ARE FREE TOO. THANK YOU.

(WHEREUPON, THE PROCEEDINGS IN THIS MATTER WERE CONCLUDED.)